4.F Resolution 04-18 and Attachments A and B

State of California AIR RESOURCES BOARD

Resolution 04-18

June 24, 2004

Agenda Item No.: 04-6-5

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules, and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, section 41712 of the Health and Safety Code requires the Board to adopt regulations to achieve the maximum feasible reduction in volatile organic compounds (VOCs) emitted by consumer products, if the Board determines that adequate data exists for it to adopt the regulations, and if the regulations are technologically and commercially feasible and necessary;

WHEREAS, pursuant to Health and Safety Code section 41712, the Board has adopted the Regulation for Reducing VOC Emissions from Consumer Products (the consumer products regulation; title 17, California Code of Regulations (CCR), sections 94507-94517), the Regulation for Reducing VOC Emissions from Antiperspirants and Deodorants (title 17, CCR, sections 94500-94506.5), and the Regulation for Reducing the Ozone Formed from Aerosol Coating Product Emissions (title 17, CCR, sections 94520-94528);

WHEREAS, the Board has also adopted Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products;

WHEREAS, on November 15, 1994, the Board adopted the California State Implementation Plan for Ozone (1994 SIP), which committed the ARB to achieve significant reductions in VOC emissions from consumer products;

WHEREAS, on October 23, 2003, the ARB adopted the Proposed 2003 State and Federal Strategy for the California State Implementation Plan (2003 Statewide Strategy) which includes updates to all elements of the 1994 SIP and includes additional consumer products measures;

WHEREAS, the 2003 Statewide Strategy contains two specific measures to reduce VOC emissions from consumer products: Measure CONS-1, in which the ARB commits to develop a measure to be proposed to the Board between 2003 and 2004, and implemented in 2006, that would achieve VOC emission reductions from consumer products of at least 2.3 tons per day in the South Coast Air Basin in 2010; and CONS-2, in which the ARB commits to develop new consumer product category limits to be proposed to the Board between 2006 and 2008, with implementation in 2008 and 2010,

that would achieve VOC emission reductions from consumer products of between 8.5 and 15 tons per day in the South Coast Air Basin in 2010;

WHEREAS, on January 9, 2004, the ARB submitted to the U.S. EPA the 2003 Statewide Strategy as a revision to the California SIP; upon approval by the U.S. EPA, the 2003 Statewide Strategy will replace the State's commitments in the 1994 SIP;

WHEREAS, in September 1997 three environmental groups (Communities for a Better Environment, the Coalition for Clean Air, and the Natural Resources Defense Council) filed a lawsuit in federal District Court regarding California's progress in achieving the 1994 SIP commitments (1994 SIP lawsuit);

WHEREAS, on January 28, 1999, the ARB reached a settlement agreement with the plaintiffs in the 1994 SIP lawsuit, and the settlement agreement was thereafter amended in December 1999 and June 2003;

WHEREAS, the amended settlement agreement includes a number of commitments, including a commitment that by June 30, 2004, ARB staff will submit to the Board and propose for adoption a consumer products control measure to achieve at least two tons per day of VOC emission reductions in the South Coast Air Basin in 2010, with a proposed implementation period of 2006;

WHEREAS, the amended settlement agreement also commits the ARB to adopt measures by December 31, 2004, that will achieve at least two tons per day of VOC emission reductions in the South Coast Air Basin in 2010;

WHEREAS, although the 2003 Statewide Strategy is intended to replace the State's original commitments under the 1994 SIP for the South Coast, the settlement agreement will remain in place until the ARB fulfills its obligations under the agreement;

WHEREAS, to fulfill the terms of the settlement agreement and to help meet the 2003 SIP commitments, staff has proposed amendments that will achieve at least 5 tons per day statewide of VOC emission reductions from consumer products, and 2.3 tons per day of emission reductions in the South Coast Air Basin by 2010;

WHEREAS, the proposed amendments would set VOC limits for 15 categories of consumer products to become effective on December 31, 2006, except the limit for "Anti-static Aerosol" products, which would become effective on December 31, 2008, and a two-tier limit for the "Shaving Gel" category with effective dates of December 31, 2006 for tier I and December 31, 2009 for tier II;

WHEREAS, the proposed amendments also include various other modifications and clarifications to existing regulatory language, including modifications to product category definitions, code-dating requirements, "sell-through" provisions, the "most restrictive limit provision," reporting requirements and additional labeling requirements for certain categories, and a number of minor changes to correct errors and improve clarity;

WHEREAS, staff has also proposed various amendments to modify and update

Method 310, including updates to test method citations and dates, and modifications to the propellant collection procedures and equations specified for the calculation of VOC content;

WHEREAS, sections 39658 and 39666 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCMs) for substances identified as toxic air contaminants in accordance with specified criteria;

WHEREAS, for toxic air contaminants for which the Board has not specified a threshold exposure level, section 39666 of the Health and Safety Code requires ATCMs to be designed to reduce emissions to the lowest level achievable through the application of best available control technology (BACT) or a more effective control method, considering factors specified in section 39665, unless the Board determines, based on an assessment of risk, that an alternative level of emissions reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, on July 13, 1989, October 12, 1990, October 10, 1991, and April 8, 1993, the Board identified methylene chloride (MeCl), trichloroethylene (TCE), perchloroethylene (Perc), and para-dichlorobenzene (PDCB) respectively as toxic air contaminants, pursuant to article 3 (commencing with section 39660), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, the Board did not specify threshold exposure levels for MeCl, TCE, Perc, and PDCB below which no significant adverse health effects are anticipated (see title 17, California Code of Regulations, sections 93000 and 93001);

WHEREAS, staff has worked with the air pollution control districts and air quality management districts, the affected sources, and the public, as required by Health and Safety Code section 39665, to prepare a report identifying the need for, and appropriate degree of control of these toxic air contaminants;

WHEREAS, the *Initial Statement of Reasons for the Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-Dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products* (Initial Statement of Reasons), which was released to the public on May 7, 2004, constitutes the report on the need and appropriate degree of regulation required under Health and Safety Code section 39665;

WHEREAS, in accordance with Health and Safety Code section 39665(c), the Initial Statement of Reasons and any relevant comments received during public consultation with the districts, affected sources, and the public have been included in the administrative record and were made available for public review and comment upon request 45 days prior to the public hearing to consider the proposed ATCM;

WHEREAS, the Initial Statement of Reasons discusses, to the extent data could reasonably be made available, the factors specified in Health and Safety Code section 39665(b);

WHEREAS, the proposed amendments include a proposed ATCM for para-dichlorobenzene solid air fresheners and toilet/urinal care products (PDCB ATCM);

WHEREAS, the proposed amendments would also prohibit the use of MeCl, Perc, and TCE in seven product categories: Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footware or Leather Care Products, and General Purpose Degreasers;

WHEREAS, the staff estimates that the proposed amendments will achieve statewide over five tons per day in emission reductions of toxic air contaminants by 2010;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the Board staff has consulted with the U.S. EPA regarding consumer product regulations promulgated by other state and local governments as provided in section 183(e) of the federal Clean Air Act.

WHEREAS, the Board finds that:

The proposed VOC limits will reduce VOC emissions by about six tons per day statewide by the year 2006, which equates to over 2.3 tons per day reduction in the South Coast Air Basin by 2010;

The proposed amendments are authorized by California law and satisfy the requirements of section 41712 of the Health and Safety Code;

There exists adequate data to support the adoption of the proposed amendments and to establish that the amendments are necessary, and are commercially and technologically feasible;

The proposed amendments are necessary to attain and maintain the state and federal ambient air quality standards, and to help fulfill California's SIP commitments to achieve emission reductions from consumer products;

The proposed amendments are necessary to meet a portion of the commitments in the settlement agreement, as amended in June 2003, with Communities for a

Better Environment, the Coalition for Clean Air, and the Natural Resources Defense Council;

The proposed standards are technologically and commercially feasible for each of the regulated consumer product categories;

The proposed amendments will not result in the elimination of a product form for any product category;

The economic impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons;

The proposed amendments significantly reduce human health, safety, or environmental risks;

The cost-effectiveness of the regulatory amendments was considered, and the amendments as adopted are cost-effective;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the regulatory amendments;

The reporting requirements of the proposed amendments which apply to businesses are necessary for the health, safety, and welfare of the people of the State; and

No reasonable alternative considered or that has otherwise been identified and brought to the attention of the ARB would be more effective in carrying out the purpose for which the amendments are proposed, or be as effective and less burdensome to affected private persons and businesses than the proposed amendments.

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, the Board further finds that:

With the mitigation measures described below, the proposed amendments will not result in any significant adverse impacts on the environment, although there may be a slight, but not significant, increase in emissions of global warming compounds;

In order to meet the proposed VOC standards manufacturers could increase their use of MeCl, Perc, and TCE in reformulated Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footware or Leather Care Products, and General Purpose Degreasers;

Adverse health and environmental impacts can occur from the use of MeCl, Perc, and TCE in these products, as described in the Initial Statement of

Reasons, and mitigation measures are necessary and appropriate to reduce emissions of these toxic air contaminants;

The proposed amendments will eliminate emissions of MeCl, Perc, and TCE by prohibiting their use in Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footware or Leather Care Products, and General Purpose Degreasers;

A complete prohibition on the use of MeCl, Perc, and TCE, as opposed to a "no new or increased use" provision, is appropriate in order fully mitigate the adverse health impacts of these toxic air contaminants and to level the playing field for all manufacturers;

No other feasible alternatives or mitigation measures would reduce the potential adverse environmental impacts from MeCl, Perc, and TCE use while at the same time providing the health benefits described in the Initial Statement of Reasons;

While the prohibition on the use of MeCl, Perc, and TCE is necessary and appropriate as a mitigation measure under CEQA, the prohibition is also within the authority granted to the ARB for control of toxic air contaminants under Health and Safety Code section 39665 et seq;

Further, staff has fulfilled the requirements for ATCM adoption specified in these sections and the prohibition has been designed, in consideration of the factors specified in Health and Safety Code section 39665(b), to reduce emissions of MeCl, Perc, and TCE to the lowest level achievable through the application of best available control technology (BACT) in Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footware or Leather Care Products, and General Purpose Degreasers; and

Suitable and effective alternative formulations that do not contain MeCl, Perc, and TCE are available for Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footware or Leather Care Products, and General Purpose Degreasers.

WHEREAS, regarding the PDCB ATCM, and in consideration of the Initial Statement of Reasons and the written comments and public testimony it has received, the Board further finds that:

In accordance with Health and Safety Code section 39666(c), the PDCB ATCM has been designed, in consideration of the factors specified in Health and Safety Code section 39665(b), to reduce emissions to the lowest level achievable through the application of BACT;

The PDCB ATCM will reduce PDCB emissions in California from solid air fresheners and toilet/urinal care products by approximately 3.3 tons per day in

2006 and will reduce ambient levels of PDCB, which will achieve near-source risk reduction benefits;

Emission reductions resulting from the PDCB ATCM will also reduce adverse environmental impacts on wastewater treatment plants;

The PDCB ATCM will reduce emissions of VOCs, since PDCB is a VOC; and

Alternative solid air fresheners and toilet/urinal care products that comply with the PDCB ATCM are currently available and in use, and are suitable and effective.

NOW, THEREFORE, BE IT RESOLVED that the Board is initiating steps toward the final adoption of the proposed amendments to sections 94501, 94506-94510, 94512, 94513, 94515, and 94526, title 17, California Code of Regulations, and the proposed amendments to ARB Method 310, as set forth Attachment A, with the modifications set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take final action to adopt the amendments set forth in Attachment A, with the modifications set forth in Attachment B and such other conforming modifications as may be appropriate, after making the modified regulatory language and any additional supporting documents and information available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if she determines that this is warranted after review of the comments.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to evaluate whether, for some product categories, it is appropriate to specify an effective date of December 31, 2006, instead of December 31, 2005, for the prohibition of MeCl,Perc, and TCE in Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footwear or Leather Care Products, and Graffiti Removers; for product categories where the Executive Officer determines that an effective date of December 31, 2006, is appropriate, the Executive Officer shall reflect this modification in the regulatory language made available to the public for the 15-day comment period described above.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take the following actions: (1) monitor the progress of manufacturers in meeting the VOC limits, (2) conduct technical assessments prior to the effective dates for each of the VOC limits, and (3) identify any significant problems in achieving the limits and propose any future regulatory modifications that may be appropriate.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to perform a detailed technical and cost assessment of manufacturers' progress towards meeting the four percent VOC limit for Shaving Gel at least one year before the December 31, 2009, effective date of the limit.

BE IT FURTHER RESOLVED that, following approval of the amendments by the Office of Administrative Law, the Board directs the Executive Officer to submit the amendments to the U.S. EPA for inclusion in the SIP.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to include in the SIP revision any additional documentation identified as necessary for approval under the federal Clean Air Act and U.S. EPA regulations, and to work with the U.S. EPA to ensure that the amendments are approved as a SIP revision.

BE IT FURTHER RESOLVED that regarding the PDCB ATCM and the prohibition of MeCl, Perc, and TCE, the Board directs the Executive Officer to undertake a public outreach program to inform all sectors of affected industry and the public about the regulatory requirements and effective dates, and to urge the affected industry to accelerate as much as possible the timeframes for eliminating these toxic air contaminants from consumer products.

I hereby certify that the above is a true and correct copy of Resolution 04-18, as adopted by the Air Resources Board.

Tori Hydlene Kori Andreoni, Clerk of the Board

Resolution 04-18

June 24, 2004

Identification of Attachments to the Board Resolution

Attachment A: Proposed amendments to the Consumer Products Regulation, the

Antiperspirants and Deodorants Regulation, the Aerosol Coating Products Regulation, and Revisions to Test Method 310, as set forth in Appendix A to the Initial Statement of Reasons, released

May 7, 2004.

Attachment B: Staff's Suggested Modifications to the Original Proposal

(distributed at the Board hearing on June 24, 2004).

APPENDIX A:

Proposed Amendments to the Consumer Products Regulation, the Antiperspirants and Deodorants Regulation, the Aerosol Coating Products Regulation, and Revisions to Test Method 310

Proposed Regulation Order REGULATION FOR REDUCING VOLATILE ORGANIC COMPOUND EMISSIONS FROM CONSUMER PRODUCTS

SUBCHAPTER 8.5 CONSUMER PRODUCTS

[Note: Proposed amendments are shown in <u>underline</u> to indicate additions and strikeout to indicate deletions.]

Amend title 17, California Code of Regulations, Sections 94507, 94508, 94509, 94510, 94512, 94513, and 94515 as follows:

Article 2. Consumer Products

94507. Applicability

Except as provided in Sections 94509(i)(j) and 94510, this article shall apply to any person who sells, supplies, offers for sale, or manufactures consumer products for use in the state of California.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

94508. Definitions

- (a) For the purpose of this article, the following definitions apply:
- (1) (1) "Adhesive" means any product that is used to bond one surface to another by attachment. "Adhesive" does not include products used on humans and animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate. For "Contact Adhesive," "Construction, Panel, and Floor Covering Adhesive," and "General Purpose Adhesive" only, "adhesive" also does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. This limitation does not apply to aerosol adhesives.
- (2)(2) "Adhesive Remover" means a product designed exclusively for the removal of to remove adhesives, caulk and other bonding materials from either a specific substrate or a variety of substrates. "Adhesive Removers" do not include products that remove adhesives intended for use on humans or animals.

For the purpose of this definition and "Adhesive Remover" subcategories (A-D), the term "adhesive" shall mean a substance used to bond one or more materials.

Adhesive includes, but is not limited to: caulks; sealants; glues; or similar substances used for the purpose of forming a bond.

- (A) "Floor or Wall Covering Adhesive Remover" means a product designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate.
- (B) "Gasket or Thread Locking Adhesive Remover" means a product designed or labeled to remove gaskets or thread locking adhesives. Products labeled for dual use as a paint stripper and gasket remover and/or thread locking adhesive remover are considered "Gasket or Thread Locking Adhesive Remover."
- (C) "General Purpose Adhesive Remover" means a product designed or labeled to remove cyanoacrylate adhesives as well as non-reactive adhesives or residue from a variety of substrates. "General Purpose Adhesive Remover" includes, but is not limited to, products that remove thermoplastic adhesives; pressure sensitive adhesives; dextrine or starch-based adhesives; casein glues; rubber or latex-based adhesives; as well as products that remove stickers; decals; stencils; or similar materials. "General Purpose Adhesive Remover" does not include "Floor or Wall Covering Adhesive Remover."
- (D) "Specialty Adhesive Remover" means a product designed to remove reactive adhesives from a variety of substrates. Reactive adhesives include adhesives that require a hardener or catalyst in order for the bond to occur. Examples of reactive adhesives include, but are not limited to: epoxies; urethanes; silicones. "Specialty Adhesive Remover" does not include "Gasket or Thread Locking Adhesive Remover."
- (-3)(3) "Aerosol Adhesive" means any adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment. Aerosol adhesives include special purpose spray adhesives, mist spray adhesives, and web spray adhesives.
- (4)(4) "Aerosol Cooking Spray" means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.
- (5)(5) "Aerosol Product" means a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product or a product's container, or by means of a mechanically induced force. "Aerosol Product" does not include pump sprays "Pump Spray".
- (-6)(6) "Agricultural Use" means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage or

processing of any animal or plant crop. "Agricultural Use" does not include the sale or use of pesticides in properly labeled packages or containers which are intended for: (A) Home use, (B) Use in structural pest control, or (C) Industrial or Institutional use. For the purposes of this definition only:

"Home use" means use in a household or its immediate environment.

"Structural pest control" means a use requiring a license under Chapter 14 (commencing with Section 8500), Division 3, of the Business and Professions Code.

"Industrial use" means use for or in a manufacturing, mining, or chemical process or use in the operation of factories, processing plants, and similar sites.

"Institutional use" means use within the lines of, or on property necessary for the operation of buildings such as hospitals, schools, libraries, auditoriums, and office complexes.

- (7)(7) "Air Freshener" means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. "Air Freshener" includes dual purpose air freshener/disinfectant products. "Air Freshener" does not include products that are used on the human body, or products that function primarily as cleaning products as indicated on a product label, or advertisement. or "Toilet/Urinal Care Product."
- (-8)(8) "All Other Carbon-Containing Compounds" means all other compounds which contain at least one carbon atom and are not a "Table B" or a "LVP-VOC."
- (9)(9) "All Other Forms" means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, "all other forms" include, but are not limited to, solids, liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).
- (10)(10)"Antimicrobial Hand or Body Cleaner or Soap" means a cleaner or soap which is designed to reduce the level of microorganisms on the skin through germicidal activity, and is regulated as an over-the-counter drug by the U.S. Food and Drug Administration. "Antimicrobial Hand or Body Cleaner or Soap" includes, but is not limited to, (A) antimicrobial hand or body washes/cleaners, (B) foodhandler hand washes, (C) healthcare personnel hand washes, (D) pre-operative skin preparations and (E) surgical scrubs. "Antimicrobial Hand or Body Cleaner or Soap" does not include prescription drug products, antiperspirants, "Astringent/Toner," deodorant, "Facial Cleaner or Soap," "General-use Hand or Body Cleaner or Soap," "Hand Dishwashing Detergent" (including antimicrobial),

- "Heavy-duty Hand Cleaner or Soap," "Medicated Astringent/Medicated Toner," and "Rubbing Alcohol."
- "Anti-Static Product" means a product that is labeled to eliminate, prevent, or inhibit the accumulation of static electricity. "Anti-Static Product" does not include "Electronic Cleaner," "Floor Polish or Wax," "Floor Coating," and products that meet the definition of "Aerosol Coating Product" or "Architectural Coating".
- (11)(12)"Architectural Coating" means a coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.
- (12)(13)"ASTM" means the American Society for Testing and Materials.
- (13)(14) "Astringent/Toner" means any product not regulated as a drug by the United States Food and Drug Administration (FDA) which is applied to the skin for the purpose of cleaning or tightening pores. This category also includes clarifiers and substrate-impregnated products. This category does not include any hand, face, or body cleaner or soap product, "Medicated Astringent/Medicated Toner", "Personal Fragrance Product", cold cream, lotion, or antiperspirant.
- (14)(15) "Automotive Brake Cleaner" means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.
- (15)(16)"Automotive Hard Paste Wax" means an automotive wax or polish which is: (A) designed to protect and improve the appearance of automotive paint surfaces; and (B) a solid at room temperature; and (C) contains 0% water by formulation.
- (16)(17) "Automotive Instant Detailer" means a product designed for use in a pump spray that is applied to the painted surface of automobiles and wiped off prior to the product being allowed to dry.
- (17)(18) "Automotive Rubbing or Polishing Compound" means a product designed primarily to remove oxidation, old paint, scratches or "swirl marks", and other defects from the painted surfaces of motor vehicles without leaving a protective barrier.
- (18)(19) "Automotive Wax, Polish, Sealant or Glaze" means a product designed to seal out moisture, increase gloss, or otherwise enhance a motor vehicle's painted surfaces. "Automotive Wax, Polish, Sealant or Glaze" includes, but is not limited to, products designed for use in autobody repair shops and "drive-through" car washes, as well as products designed for the general public. "Automotive Wax, Polish, Sealant or Glaze" does not include "Automotive Rubbing or Polishing Compounds", automotive wash and wax products, surfactant-containing car

- wash products, and products designed for use on unpainted surfaces such as bare metal, chrome, glass, or plastic.
- (19)(20) "Automotive Windshield Washer Fluid (Dilutable)" means any liquid which meets the following criteria:
 - (A) the product is sold either in a container with a capacity of 55 gallons or more, or a container with a capacity of one quart or less; and
 - (B) the product is designed for use in a motor vehicle windshield washer fluid system either as an anti-freeze or for the purpose of cleaning, washing, bug removal, or wetting the windshield(s).
 - "Automotive Windshield Washer Fluid (Dilutable)" does not include any fluid which is placed in a new motor vehicle at the time the vehicle is manufactured.
- (20)(21) "Automotive Windshield Washer Fluid (Pre-Mixed)" means any liquid which meets the following criteria:
 - (A) the product is sold in a container with a capacity that is greater than one quart, but less than 55 gallons; and
 - (B) the product is designed for use in a motor vehicle windshield washer fluid system as an anti-freeze or for the purpose of cleaning, washing, bug removal, or wetting the windshield(s).
 - "Automotive Windshield Washer Fluid (Pre-Mixed)" does not include any fluid which is placed in a new motor vehicle at the time the vehicle is manufactured.
- (21)(22) "Bathroom and Tile Cleaner" means a product designed to clean tile or surfaces in bathrooms. "Bathroom and Tile Cleaner" does not include products specifically designed <u>primarily</u> to clean toilet bowls, or toilet tanks, or <u>urinals</u>.
- (22)(23)"Bug and Tar Remover" means a product designed labeled to remove either or both of the following from painted motor vehicle surfaces without causing damage to the finish: (A) biological-type residues such as insect carcasses and tree sap and, (B) road grime, such as road tar, roadway paint markings, and asphalt.
- (23)(24) "California Sales" means the sales (net pounds of product, less packaging and container, per year) in California for either the calendar year immediately prior to the year that the registration information required by the Executive Officer pursuant to section 94513 (required information) is due or, if that data is not available, any consecutive 12 month period commencing no earlier than 2 years prior to the due date of the registration required information. If direct sales data for California is not available, sales may be estimated by prorating national or regional sales data by population.

- (24)(25) "Carburetor or Fuel-Injection Air Intake Cleaners" means a product designed to remove fuel deposits, dirt, or other contaminants from a carburetor, choke, throttle body of a fuel-injection system, or associated linkages. "Carburetor or fuel-injection air intake cleaners" does not include products designed exclusively to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors.
- (25)(26) "Carpet and Upholstery Cleaner" means a cleaning product designed for the purpose of eliminating dirt and stains on rugs, carpeting, and the interior of motor vehicles and/or on household furniture or objects upholstered or covered with fabrics such as wool, cotton, nylon or other synthetic fabrics. "Carpet and Upholstery Cleaner" includes, but is not limited to, products that make fabric protectant claims. "Carpet and Upholstery Cleaner" does not include "General Purpose Cleaners", "Spot Removers", vinyl or leather cleaners, dry cleaning fluids, or products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.
- (26)(27)"Charcoal Lighter Material" means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. "Charcoal Lighter Material" does not include any of the following: (A) electrical starters and probes, (B) metallic cylinders using paper tinder, (C) natural gas, (D) propane, and (E) fat wood.
- (27)(28) "Colorant" means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.
- (28)(29) "Construction, Panel, and Floor Covering Adhesive" means any one-component adhesive that is designed exclusively for the installation, remodeling, maintenance, or repair of: (A) structural and building components that include, but are not limited to, beams, trusses, studs, paneling (drywall or drywall laminates, fiberglass reinforced plastic (FRP), plywood, particle board, insulation board, pre-decorated hardboard or tileboard, etc.), ceiling and acoustical tile, molding, fixtures, countertops or countertop laminates, cove or wall bases, and flooring or subflooring; or (B) floor or wall coverings that include, but are not limited to, wood or simulated wood covering, carpet, carpet pad or cushion, vinyl-backed carpet, flexible flooring material, nonresilient flooring material, mirror tiles and other types of tiles, and artificial grass. "Construction, Panel, and Floor Covering Adhesive" does not include "Floor Seam Sealer".
- (29)(30) "Consumer" means any person who seeks, purchases, or acquires any consumer product for personal, family, household, or institutional use. Persons acquiring a consumer product for resale are not "consumers" for that product.
- (30)(31)"Consumer Product" means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home,

lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. As used in this article, the term "consumer product" shall also refer to aerosol adhesives, including aerosol adhesives used for consumer, industrial, and commercial uses.

- (31)(32)"Contact Adhesive" means an adhesive that: (A) is designed for application to both surfaces to be bonded together, and (B) is allowed to dry before the two surfaces are placed in contact with each other, and (C) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other, and (D) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces. "Contact Adhesive" does not include rubber cements that are primarily intended for use on paper substrates. "Contact Adhesive" also does not include vulcanizing fluids that are designed and labeled for tire repair only.
- (33) "Contact Adhesive General Purpose" means any contact adhesive that is not a "Contact Adhesive Special Purpose".
- "Contact Adhesive Special Purpose" means a contact adhesive that: (A) is used to bond melamine-covered board, unprimed metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber, high pressure laminate or wood veneer 1/16 inch or less in thickness to any porous or nonporous surface, and is sold in units of product, less packaging, that contain more than eight fluid ounces, or (B) is used in automotive applications that are (1.) automotive underthe-hood applications requiring heat, oil or gasoline resistance, or (2.) body-side molding, automotive weatherstrip or decorative trim.
- (32)(35)"Container/Packaging" means the part or parts of the consumer or institutional product which serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances which is solely responsible for accomplishing the purposes for which the product was designed or intended. "Container/Packaging" includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached.
- (33)(36) "Crawling Bug Insecticide" means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. "Crawling Bug Insecticide" does not include products designed to be used exclusively on humans or animals, or any house dust mite product. For the purposes of this definition only:

"House dust mite product" means a product whose label, packaging, or accompanying literature states that the product is suitable for use against

house dust mites, but does not indicate that the product is suitable for use against ants, cockroaches, or other household crawling arthropods.

"House dust mite" means mites which feed primarily on skin cells shed in the home by humans and pets and which belong to the phylum Arthropoda, the subphylum Chelicerata, the class Arachnida, the subclass Acari, the order Astigmata, and the family Pyroglyphidae.

(37) "Deodorant Body Spray" means:

- (A) for products manufactured before January 1, 2006: a "Personal Fragrance Product" with 20 percent or less fragrance.
- (B) for products manufactured on or after January 1, 2006: a "Personal Fragrance Product" with 20 percent or less fragrance, that is designed for application all over the human body to provide a scent. A "Deodorant Body Spray" product that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used on or applied to the human axilla, is a "Deodorant" as defined in section 94501(d).
- (34)(38) Device means any instrument or contrivance (other than a firearm) which is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacteria, virus, or other microorganism on or in living man or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom.
- (35)(39)*Disinfectant" means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, et seq.). "Disinfectant" does not include any of the following: (A) products designed solely for use on human or animals, (B) products designed for agricultural use, (C) products designed solely for use in swimming pools, therapeutic tubs, or hot tubs, (D) products which, as indicated on the principal display panel or label, are designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.
- (36)(40) "Distributor" means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.
- (37)(41) "Double Phase Aerosol Air Freshener" means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

- (38)(42)"Dry Cleaning Fluid" means any non-aqueous liquid product designed and labeled exclusively for use on: (1) fabrics which are labeled "for dry clean only", such as clothing or drapery; or (2) "S-coded" fabrics. "Dry Cleaning Fluid" includes, but is not limited to, those products used by commercial dry cleaners and commercial businesses that clean fabrics such as draperies at the customer's residence or work place. "Dry Cleaning Fluid" does not include "Spot Remover" or "Carpet and Upholstery Cleaner". For the purposes of this definition, S-coded fabric means an upholstery fabric designed to be cleaned only with water-free spot cleaning products as specified by the Joint Industry Fabric Standards Committee."
- (39)(43) "Dual Purpose Air Freshener/Disinfectant" means an aerosol product that is represented on the product container for use as both a disinfectant and an air freshener, or is so represented on any sticker, label, packaging, or literature attached to the product container.
- (40)(44) "Dusting Aid" means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. "Dusting Aid" does not include "Pressurized Gas Duster." products which consist entirely of compressed gases for use in electronic or other specialty areas.
- "Electrical Cleaner" means a product labeled to remove heavy soils such as grease, grime, or oil from electrical equipment, including, but not limited to, electric motors, armatures, relays, electric panels, or generators. Electrical Cleaner does not include "General Purpose Cleaner," "General Purpose Degreaser," "Dusting Aid," "Electronic Cleaner," "Energized Electrical Cleaner," "Pressurized Gas Duster," "Engine Degreaser," "Anti-Static Product," "or products designed to clean the casings or housings of electrical equipment.
- (41)(46) "Electronic Cleaner" means a product designed labeled specifically for the removal of dirt, grease, or grime moisture, dust, flux, or oxides from electrical the internal components of electronic or precision equipment such as electric motors, circuit boards, electricity panels, and generators and the internal components of electronic devices, including but not limited to, radios, compact disc (CD) players, digital video disc (DVD) players, and computers. Electronic Cleaner does not include "General Purpose Cleaner," "General Purpose Degreaser," "Dusting Aid," "Pressurized Gas Duster," "Engine Degreaser," "Electrical Cleaner," "Energized Electrical Cleaner," "Anti-Static Product," or products designed to clean the casings or housings of electronic equipment.
- (47) "Energized Electrical Cleaner" means a product that meets both of the following criteria:
 - 1) the product is labeled to clean and/or degrease electrical equipment, where cleaning and/or degreasing is accomplished when electrical current exists, or

- when there is a residual electrical potential from a component, such as a capacitor;
- 2) the product label clearly displays the statements: "Energized Equipment use only. Not to be used for motorized vehicle maintenance, or their parts."

"Energized Electrical Cleaner" does not include "Electronic Cleaner."

- (42)(48) "Engine Degreaser" means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.
- (43)(49) "Executive Officer" means the Executive Officer of the Air Resources Board, or his or her delegate.
- (44)(50) "Existing Product" means any formulation of the same product category and form sold, supplied, manufactured, or offered for sale in California prior to the following dates, or any subsequently introduced identical formulation:
 - (A) October 21, 1991, for all products listed in section 94509(a) that have initial effective dates of January 1, 1993, or January 1, 1994;
 - (B) January 6, 1993, for all products listed in section 94509(a) that have initial effective dates of January 1, 1995, or January 1, 1997, and charcoal lighter materials subject to section 94509(h)(i);
 - (C) August 18, 1998, for all products listed in section 94509(a) that have initial effective dates of January 1, 2001, January 1, 2002, January 1, 2003, or January 1, 2005;
 - (D) the operative date of the "Mid-term Measures II" amendments (i.e. 30 days after the "Mid-term Measures II" rulemaking action is approved by the Office of Administrative Law), for all products in the following product categories listed in section 94509(a): "Non-aerosol General Purpose Degreaser," "Sealant and Caulking Compound," and "Tire Sealant and Inflator."
- (45)(51) "Fabric Protectant" means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of liquid into the fabric's fibers. "Fabric Protectant" does not include waterproofers, products designed for use solely on leather, or products designed for use solely on fabrics which are labeled "for dry clean only" and sold in containers of 10 fluid ounces or less.
- (52) "Fabric Refresher" means a product labeled to neutralize or eliminate odors on fabric including, but not limited to, soft household surfaces, rugs, carpeting, draperies, bedding, automotive interiors, footwear, athletic equipment, clothing and/or on household furniture or objects upholstered or covered with fabrics such

- as wool, cotton, nylon, or other synthetic fabrics. "Fabric Refresher" does not include "Anti-static Product," "Carpet and Upholstery Cleaner," "Footwear or Leather Care Product," "Spot Remover," or "Disinfectant," or products labeled for application to both fabric and human skin.
- (46)(53) "Facial Cleaner or Soap" means a cleaner or soap designed primarily to clean the face. "Facial Cleaner or Soap" includes, but is not limited to, facial cleansing creams, gels semisolids, liquids, lotions, and substrate-impregnated forms. "Facial Cleaner or Soap" does not include prescription drug products, "Antimicrobial Hand or Body Cleaner or Soap," "Astringent/Toner," "General-use Hand or Body Cleaner or Soap," "Medicated Astringent/Medicated Toner," or "Rubbing Alcohol."
- (47)(54)"Fat Wood" means pieces of wood kindling with high naturally-occurring levels of sap or resin which enhance ignition of the kindling. "Fat wood" does not include any kindling with substances added to enhance flammability, such as wax-covered or wax-impregnated wood-based products.
- (48)(55)"Flea and Tick Insecticide" means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. "Flea and Tick Insecticide" does not include products that are designed to be used exclusively on humans or animals and their bedding.
- (49)(56) "Flexible Flooring Material" means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl and vinyl composite flooring.
- (57) "Floor Coating" means an opaque coating that is labeled and designed for application to flooring, including but not limited to, decks, porches, steps, and other horizontal surfaces which may be subject to foot traffic.
- (50)(58) "Floor Polish or Wax" means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. "Floor Polish or Wax" does not include "spray buff products", products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations.
- (51)(59)"Floor Seam Sealer" means any product designed and labeled exclusively for bonding, fusing, or sealing (coating) seams between adjoining rolls of installed flexible sheet flooring.
- (52)(60) "Floor Wax Stripper" means a product designed to remove natural or synthetic floor polishes or waxes through breakdown of the polish or wax polymers, or by dissolving or emulsifying the polish or wax. "Floor Wax Stripper" does not include aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.

- (53)(61)"Flying Bug Insecticide" means any insecticide product that is designed for use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. "Flying Bug Insecticide" does not include "wasp and hornet insecticide", products that are designed to be used exclusively on humans or animals, or any moth-proofing product. For the purposes of this definition only, "moth-proofing product" means a product whose label, packaging, or accompanying literature indicates that the product is designed to protect fabrics from damage by moths, but does not indicate that the product is suitable for use against flying insects or other flying arthropods.
- "Footwear or Leather Care Product" means any product designed or labeled to be applied to footwear or to other leather articles/components, to maintain, enhance, clean, protect, or modify the appearance, durability, fit, or flexibility of the footwear or leather article/component. Footwear includes both leather and non-leather foot apparel. "Footwear or Leather Care Product" does not include "Fabric Protectant," "General Purpose Adhesive," "Contact Adhesive," "Vinyl/Fabric/Leather/Polycarbonate Coating," as defined in section 94521(a), "Rubber and Vinyl Protectant," "Fabric Refresher," products solely for deodorizing, or sealant products with adhesive properties used to create external protective layers greater than 2 millimeters thick.
- (54)(63) "Fragrance" means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm of Hg at 20°C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.
- (55)(64) "Furniture Maintenance Product" means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. "Furniture Maintenance Product" does not include "Ddusting Aaids," "Wood Cleaners," and products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.
- (56)(65)"Furniture Coating" means any paint designed for application to room furnishings including, but not limited to, cabinets (kitchen, bath and vanity), tables, chairs, beds, and sofas.
- (57)(66)*Gel" means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.
- (58)(67) "General Purpose Adhesive" means any non-aerosol adhesive designed for use on a variety of substrates. "General Purpose Adhesive" does not include (A) contact adhesives, (B) construction, panel, and floor covering adhesives, (C) adhesives designed exclusively for application on one specific category of substrates (i.e., substrates that are composed of similar materials, such as different types of metals, paper products, ceramics, plastics, rubbers, or vinyls),

- or (D) adhesives designed exclusively for use on one specific category of articles (i.e., articles that may be composed of different materials but perform a specific function, such as gaskets, automotive trim, weather-stripping, or carpets).
- (59)(68) "General Purpose Cleaner" means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. "General Purpose Cleaner" includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces.
- (60)(69)"General Purpose Degreaser" means any product designed labeled to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts. "General Purpose Degreaser" does not include "Engine Degreaser," "General Purpose Cleaner", "Adhesive Remover", "Electronic Cleaner", "Electrical Cleaner," "Energized Electrical Cleaner," "Metal Polish/Cleanser", products used exclusively in "solvent cleaning tanks or related equipment," or products that are (A) sold exclusively to establishments which manufacture or construct goods or commodities; and (B) labeled "not for retail sale". "Solvent cleaning tanks or related equipment" includes, but is not limited to, cold cleaners, vapor degreasers, conveyorized degreasers, film cleaning machines, or products designed to clean miscellaneous metallic parts by immersion in a container.
- (61)(70)"General-use Hand or Body Cleaner or Soap" means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. "General-use Hand or Body Cleaner or Soap" includes, but is not limited to, hand or body washes, dual-purpose shampoo-body cleaners, shower or bath gels, and moisturizing cleaners or soaps. "General-use Hand or Body Cleaner or Soap" does not include prescription drug products, "Antimicrobial Hand or Body Cleaner or Soap", "Astringent/Toner", "Facial Cleaner or Soap", "Hand Dishwashing Detergent" (including antimicrobial), "Heavy-duty Hand Cleaner or Soap", "Medicated Astringent/Medicated Toner", or "Rubbing Alcohol."
- (62)(71)"Glass Cleaner" means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.
- "Graffiti Remover" means a product labeled to remove spray paint, ink, marker, crayon, lipstick, nail polish, or shoe polish, from a variety of non-cloth or non-fabric substrates. "Graffiti Remover" does not include "Paint Remover or Stripper," "Nail Polish Remover," or "Spot Remover." Products labeled for dual use as both a paint stripper and graffiti remover are considered "Graffiti Removers."

- (63)(73)"Hair Mousse" means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.
- (64)(74) "Hair Shine" means any product designed for the primary purpose of creating a shine when applied to the hair. "Hair Shine" includes, but is not limited to, dualuse products designed primarily to impart a sheen to the hair. "Hair Shine" does not include "Hair Spray Hairspray", "Hair Mousse", "Hair Styling Product," "Hair Styling Gel" or spray gel, "Hair Styling Product", or products whose primary purpose is to condition or hold the hair.
- (65)(75)"Hair Styling Gel" means a consumer product manufactured before

 December 31, 2006, that is a high viscosity, often gelatinous, product that contains a resin and is designed for the application to hair to aid in styling and sculpting of the hair coiffure.
- (66)(76)"Hairspray Hair Spray" means:
 - (A) for products manufactured before December 31, 2006: a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure which will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time, and
 - (B) for products manufactured on or after December 31, 2006: a consumer product that is applied to styled hair, and is designed or labeled to provide sufficient rigidity, to hold, retain and/or (finish) the style of the hair for a period of time. "Hair Spray" includes aerosol hair sprays, pump hair sprays, spray waxes; color, glitter, or sparkle hairsprays that make finishing claims; and products that are both a styling and finishing product. "Hair Spray" does not include spray products that are intended to aid in styling but does not provide finishing of a hairstyle.

For the purposes of this subchapter, "finish" or "finishing" means the maintaining and/or holding of previously styled hair for a period of time.

For the purposes of this subchapter, "styling" means the forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

(77) "Hair Styling Product" means a consumer product manufactured on or after December 31, 2006, that is designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling and/or sculpting of the hair. "Hair Styling Product" includes, but is not limited to hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hairstyle, and leave-in volumizers, detanglers and/or conditioners that make styling claims. "Hair Styling Product"

does not include "Hair Mousse", "Hair Shine", "Hair Spray", or shampoos and/or conditioners that are rinsed from the hair prior to styling.

For the purposes of this subchapter, "finish" or "finishing" means the maintaining and/or holding of previously styled hair for a period of time.

For the purposes of this subchapter, "styling" means the forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

- (67)(78)"Heavy-Duty Hand Cleaner or Soap" means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, putty, printer's ink, paint, graphite, cement, carbon, asphalt, or adhesives from the hand with or without the use of water. "Heavy-duty Hand Cleaner or Soap" does not include prescription drug products, "Antimicrobial Hand or Body Cleaner or Soap", "Astringent/Toner", "Facial Cleaner or Soap", "General-use Hand or Body Cleaner or Soap", "Medicated Astringent/Medicated Toner" or "Rubbing Alcohol."
- (68)(79)"Herbicide" means a pesticide product designed to kill or retard a plant's growth, but excludes products that are: (A) for agricultural use, or (B) restricted materials that require a permit for use and possession.
- (69)(80) "Household Product" means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.
- (70)(81)"Insect Repellent" means a pesticide product that is designed to be applied on human skin, hair or attire worn on humans in order to prevent contact with or repel biting insects or arthropods.
- (71)(82)"Insecticide" means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are: (A) for agricultural use, or (B) for a use which requires a structural pest control license under Chapter 14 (commencing with Section 8500) of the Business and Professions Code, or (C) restricted materials that require a permit for use and possession.
- (72)(83) Insecticide Fogger means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.
- (73)(84) "Institutional Product" or "Industrial and Institutional (I&I) Product" means a consumer product that is designed for use in the maintenance or operation of an establishment that: (A) manufactures, transports, or sells goods or commodities, or provides services for profit; or (B) is engaged in the nonprofit promotion of a particular public, educational, or charitable cause. "Establishments" include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts

- centers, health clubs, theaters, or transportation companies. "Institutional Product" does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.
- (74)(85)"Label" means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product or consumer product package, for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.
- (75)(86) "Laundry Prewash" means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.
- (76)(87)"Laundry Starch Product" means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. "Laundry Starch Product" includes, but is not limited to, fabric finish, sizing, and starch.
- (77)(88)"Lawn and Garden Insecticide" means an insecticide product designed primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.
- (78)(89)"Liquid" means a substance or mixture of substances which is capable of a visually detectable flow as determined under ASTM D-4359-90. "Liquid" does not include powders or other materials that are composed entirely of solid particles.
- (79)(90)"Lubricant" means a product designed to reduce friction, heat, noise, or wear between moving parts, or to loosen rusted or immovable parts or mechanisms. "Lubricant" does not include automotive power steering fluids; products for use inside power generating motors, engines, and turbines, and their associated power-transfer gearboxes; two cycle oils or other products designed to be added to fuels; products for use on the human body or animals or products that are (1) sold exclusively to establishments which manufacture or construct goods or commodities, and (2) labeled "not for retail sale".
- (80)(91)"LVP-VOC" means a chemical "compound" or "mixture" that contains at least one carbon atom and meets one of the following:
 - (A) has a vapor pressure less than 0.1 mm Hg at 20°C, as determined by ARB Method 310; or
 - (B) is a chemical "compound" with more than 12 carbon atoms, or a chemical "mixture" comprised solely of "compounds" with more than 12 carbon atoms

- as verified by formulation data, and the vapor pressure and boiling point are is unknown; or
- (C) is a chemical "compound" with a boiling point greater than 216°C, as determined by ARB Method 310; or
- (D) is the weight percent of a chemical "mixture" that boils above 216°C, as determined by ARB Method 310.

For the purposes of the definition of LVP-VOC, chemical "compound" means a molecule of definite chemical formula and isomeric structure, and chemical "mixture" means a substrate comprised of two or more chemical "compounds".

- (81)(92) "Manufacturer" means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.
- (82)(93) "Medicated Astringent/Medicated Toner" means any product regulated as a drug by the Food and Drug Administration (FDA) which is applied to the skin for the purpose of cleaning or tightening pores. "Medicated Astringent/Medicated Toner" includes, but is not limited to, clarifiers and substrate-impregnated products. "Medicated Astringent/Medicated Toner" does not include hand, face, or body cleaner or soap products, "Personal Fragrance Products", "Astringent/Toner," cold cream, lotion, antiperspirants, or products that must be purchased with a doctor's prescription.
- (83)(94) "Metal Polish/Cleanser" means any product designed primarily to improve the appearance of finished metal, metallic, or metallized surfaces by physical or chemical action. To "improve the appearance" means to remove or reduce stains, impurities, or oxidation from surfaces or to make surfaces smooth and shiny. "Metal Polish/Cleanser" includes, but is not limited to, metal polishes used on brass, silver, chrome, copper, stainless steel and other ornamental metals. "Metal Polish/Cleanser" does not include "Automotive Wax, Polish, Sealant or Glaze", wheel cleaner, "Paint Remover or Stripper", products designed and labeled exclusively for automotive and marine detailing, or products designed for use in degreasing tanks.
- (84)(95) "Mist spray adhesive" means any aerosol adhesive which is not a special purpose spray adhesive and which delivers a particle or mist spray, resulting in the formation of fine, discrete particles that yield a generally uniform and smooth application of adhesive to the substrate.
- (85)(96) "Multi-purpose Dry Lubricant" means any lubricant which is: (A) designed and labeled to provide lubricity by depositing a thin film of graphite, molybdenum disulfide ("moly"), or polytetrafluoroethylene or closely related fluoropolymer ("teflon") on surfaces, and (B) designed for general purpose lubrication, or for use in a wide variety of applications.

- (86)(97) "Multi-purpose Lubricant" means any lubricant designed for general purpose lubrication, or for use in a wide variety of applications. "Multi-purpose Lubricant" does not include "Multi-purpose Dry Lubricants", "Penetrants", or "Silicone-based Multi-purpose Lubricants".
- (87)(98) "Multi-purpose Solvent" means any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning, dispersing or dissolving other organic materials. "Multi-purpose Solvent" includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories. "Multi-purpose Solvent" does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.
- (88)(99)"Nail Polish" means any clear or colored coating designed for application to the fingernails or toenails and including but not limited to, lacquers, enamels, acrylics, base coats and top coats.
- (89)(100) "Nail Polish Remover" means a product designed to remove nail polish and coatings from fingernails or toenails.
- (90)(101)"Non-Carbon Containing Compound" means any compound which does not contain any carbon atoms.
- (91)(102)"Nonresilient Flooring" means flooring of a mineral content which is not flexible. "Nonresilient Flooring" includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.
- (92)(103) "Non-Selective Terrestrial Herbicide" means a terrestrial herbicide product that is toxic to plants without regard to species.
- (93)(104)"Oven Cleaner" means any cleaning product designed to clean and to remove dried food deposits from oven walls.
- (94)(105) "Paint" means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer which is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.
- (95)(106) "Paint Remover or Stripper" means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. "Paint Remover or Stripper" does not include "Multi-purpose Solvents," paint brush cleaners, products designed and labeled

- exclusively to remove <u>as "Ggraffiti Removers,"</u> and hand cleaner products that claim to remove paints and other related coatings from skin.
- (107) "Paint Thinner" means any volatile liquid used for reducing the viscosity of coating compositions or components.
- (96)(108) "Penetrant" means a lubricant designed and labeled primarily to loosen metal parts that have bonded together due to rusting, oxidation, or other causes. "Penetrant" does not include "Multi-purpose Lubricants" that claim to have penetrating qualities, but are not labeled primarily to loosen bonded parts.
- (97)(109)"Person" shall have the same meaning as defined in Health and Safety Code Section 39047.
- (98)(110)"Personal Fragrance Product" means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, aftershave, and toilet water. "Personal Fragrance Product" does not include: (A) <u>Deodorant, as defined in section 94510(d)</u>, products exclusively for human axillae; (B) medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body; (C) mouthwashes, breath fresheners and deodorizers; (D) lotions, moisturizers, powders or other skin care products used primarily to alleviate skin conditions such as dryness and irritations; (E) products designed exclusively for use on human genitalia; (F) soaps, shampoos, and products primarily used to clean the human body; and (G) fragrance products designed to be used exclusively on non-human animals.
- (99)(111) "Pesticide" means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term "pesticide" will not include any substance, mixture of substances, or device which the United States Environmental Protection Agency does not consider to be a pesticide.
- (112) "Pressurized Gas Duster" means a pressurized product labeled to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards, and other types of surfaces that cannot be cleaned with solvents. "Pressurized Gas Duster" does not include "Dusting Aid."
- (100)(113)"Principal Display Panel or Panels" means that part, or those parts of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements

- pertaining to the "principal display panel" shall pertain to all such "principal display panels".
- (101)(114)"Product Brand Name" means the name of the product exactly as it appears on the principal display panel of the product.
- (102)(115)"Product Category" means the applicable category which best describes the product as listed in this Section 94508.
- (103)(116)"Product Form", for the purpose of complying with Section 94513 only, means the applicable form which most accurately describes the product's dispensing form as follows:

A = Aerosol Product

S = Solid

P = Pump Spray

L = Liquid

G = Gel

SS = Semisolid

O = Other

- (104)(117) "Propellant" means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.
- (105)(118)"Pump Spray" means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.
- (106)(119) "Responsible Party" means the company, firm or establishment which is listed on the product's label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was "manufactured for" or "distributed by", as noted on the label.
- (107)(120) "Restricted Materials" means pesticides established as restricted materials under Title 3, California Code of Regulations, section 6400.
- (108)(121) "Retailer" means any person who sells, supplies, or offers consumer products for sale directly to consumers.
- (109)(122)"Retail Outlet" means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.
- (110)(123) "Rubber and Vinyl Protectant" means any product designed to protect, preserve or renew vinyl, rubber, and plastic on vehicles, tires, luggage, furniture, and household products such as vinyl covers, clothing, and accessories. "Rubber and Vinyl Protectant" does not include products primarily designed to

- clean the wheel rim, such as aluminum or magnesium wheel cleaners, and tire cleaners that do not leave an appearance-enhancing or protective substance on the tire.
- (111)(124) "Rubbing Alcohol" means any product containing isopropyl alcohol (also called isopropanol) or denatured ethanol and labeled for topical use, usually to decrease germs in minor cuts and scrapes, to relieve minor muscle aches, as a rubefacient, and for massage.
- (112)(125)"Sealant and Caulking Compound" means any product with adhesive properties that is designed to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. "Sealant and Caulking Compound" does not include roof cements and roof sealants; insulating foams; removable caulking compounds; clear/paintable/water resistant caulking compounds; floor seam sealers; products designed exclusively for automotive uses; or sealers that are applied as continuous coatings. "Sealant and Caulking Compound" also does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. For the purposes of this definition only, "removable caulking compounds" means a compound which temporarily seals windows or doors for three to six month time intervals, and "clear/paintable/water resistant caulking compounds" means a compound which contains no appreciable level of opaque fillers or pigments; transmits most or all visible light through the caulk when cured; is paintable; and is immediately resistant to precipitation upon application.
- (113)(126)"Semisolid" means a product that, at room temperature, will not pour, but will spread or deform easily, including but not limited to gels, pastes, and greases.
- (114)(127)"Shaving Cream" means an aerosol product which dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair. "Shaving Cream" does not include "Shaving Gel."
- "Shaving Gel" means an aerosol product which dispenses a post-foaming semisolid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other bodily hair. "Shaving Gel" does not include "Shaving Cream."
- (415)(129)"Silicone-based Multi-purpose Lubricant" means any lubricant which is:
 (A) designed and labeled to provide lubricity primarily through the use of silicone compounds including, but not limited to, polydimethylsiloxane, and (B) designed and labeled for general purpose lubrication, or for use in a wide variety of applications. "Silicone-based Multi-purpose Lubricant" does not include products designed and labeled exclusively to release manufactured products from molds.

- (116)(130)"Single Phase Aerosol Air Freshener" means an aerosol air freshener with the liquid contents in a single homogeneous phase and which does not require that the product container be shaken before use.
- (117)(131) "Solid" means a substance or mixture of substances which, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D-4359-90.
- (118)(132) "Spot Remover" means any product designed labeled to clean localized areas, or remove localized spots or stains on cloth or fabric such as drapes, carpets, upholstery, and clothing, that does not require subsequent laundering to achieve stain removal. "Spot Remover" does not include "Dry Cleaning Fluid", "Laundry Prewash", "Carpet and Upholstery Cleaner", or "Multi-purpose Solvent".
- (119)(133) "Spray Buff Product" means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.
- (120)(134) "Special Purpose Spray Adhesive" means an aerosol adhesive that meets any of the following definitions:
 - (A) "Mounting adhesive" means an aerosol adhesive designed to permanently mount photographs, artwork, and any other drawn or printed media to a backing (paper, board, cloth, etc.) without causing discoloration to the artwork.
 - (B) "Flexible vinyl adhesive" means an aerosol adhesive designed to bond flexible vinyl to substrates. Flexible vinyl means a nonrigid polyvinyl chloride plastic with at least five percent, by weight, of plasticizer content. A plasticizer is a material, such as a high boiling point organic solvent, that is incorporated into a vinyl to increase its flexibility, workability, or distensibility, and may be determined using ASTM Method E260-91 or from product formulation data.
 - (C) "Polystyrene Foam Adhesive" means an aerosol adhesive designed to bond polystyrene foam (e.g. Styrofoam®, expanded polystyrene foam, etc.) to substrates.
 - (D) "Automobile Headliner Adhesive" means an aerosol adhesive designed to bond together layers in motor vehicle headliners.
 - (E) "Polyolefin Adhesive" means an aerosol adhesive designed to bond polyolefins (e.g. polyethylene, polypropylene, etc.) to substrates.
 - (F) "Laminate Repair/Edgebanding Adhesive" means an aerosol adhesive designed for:

- (1) the touch-up or repair of items laminated with high pressure laminates (e.g. lifted edges, delaminations, etc.), or for
- (2) the touch-up, repair, or attachment of edgebanding materials, including, but not limited to, other laminates, synthetic marble, veneers, wood moulding, and decorative metals.

For the purposes of this definition "high pressure laminate" means sheet materials which consist of paper, fabric, or other core material that have been laminated at temperatures exceeding 265 degrees F, and at pressures between 1,000 and 1,400 psi.

- (G)"Automotive Engine Compartment Adhesive" means an aerosol adhesive designed for use in motor vehicle under-the-hood applications which require oil and plasticizer resistance, as well as high shear strength, at temperatures of 200-275° F.
- (121)(135)"Table B Compound" means any carbon-containing compound listed as an exception to the definition of VOC in Section 94508.
- (122)(136)"Terrestrial" means to live on or grow from land.
- (123)(137)"Tire Sealant and Inflator" means any pressurized product that is designed to temporarily inflate and seal a leaking tire.
- (138) "Toilet/Urinal Care Product" means any product designed or labeled to clean and/or to deodorize toilet bowls, toilet tanks, or urinals. Toilet bowls, toilet tanks, or urinals includes, but is not limited to, toilets or urinals connected to permanent plumbing in buildings and other structures, portable toilets or urinals placed at temporary or remote locations, and toilet or urinals in vehicles such as buses, recreational motor homes, boats, ships, and aircraft. "Toilet/Urinal Care Product" does not include "Bathroom and Tile Cleaner" or "General Purpose Cleaner."
- (124)(139) "Type A Propellent" means a compressed gas such as CO₂, N₂, N₂O, or compressed air which is used as a propellent, and is either incorporated with the product or contained in a separate chamber within the product's packaging.
- (125)(140) "Type B Propellent" means any halocarbon which is used as a propellent including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).
- (126)(141) "Type C Propellent" means any propellent which is not a Type A or Type B propellent, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).
- (127)(142)"Undercoating" means any aerosol product designed to impart a protective, non-paint layer to the undercarriage, trunk interior, and/or firewall of motor

vehicles to prevent the formation of rust or to deaden sound. "Undercoating" includes, but is not limited to, rubberized, mastic, or asphaltic products.

- (128)(143)"Usage Directions" means the text or graphics on the product's principal display panel, label, or accompanying literature which describes to the end user how and in what quantity the product is to be used.
- (129)(144) "Volatile Organic Compound (VOC)" means any compound containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:
 - (A) methane, methylene chloride (dichloromethane), 1.1.1-trichloroethane (methyl chloroform). trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12). 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113), 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123), 1,1-dichloro-1-fluoroethane (HCFC-141b), 1-chloro-1,1-difluoroethane (HCFC-142b), 2-chloro-1.1.1.2-tetrafluoroethane (HCFC-124). trifluoromethane (HFC-23), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1,2-tetrafluoroethane (HFC-134a), pentafluoroethane (HFC-125), 1.1.1-trifluoroethane (HFC-143a). 1,1-difluoroethane (HFC-152a), cyclic, branched, or linear completely methylated siloxanes, the following classes of perfluorocarbons:
 - 1. cyclic, branched, or linear, completely fluorinated alkanes;
 - cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
 - cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
 - 4. sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds to carbon and fluorine, and
 - (B) the following low-reactive organic compounds which have been exempted by the U.S. EPA: acetone, ethane, methyl acetate,

- parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene), perchloroethylene (tetrachloroethylene).
- (130)(145)"VOC Content" means the total weight of VOC in a product expressed as a percentage of the product weight (exclusive of the container or packaging), as determined pursuant to sections 94515(a) and (b).
- (131)(146) "Wasp and Hornet Insecticide" means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray from a distance a directed stream or burst at the intended insects, or their hiding place.
- (132)(147) "Waterproofer" means a product designed and labeled exclusively to repel water from fabric or leather substrates. "Waterproofer" does not include "Fabric Protectants".
- (133)(148)"Wax" means a material or synthetic thermoplastic substance generally of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). "Wax" includes, but is not limited to, substances derived from the secretions of plants and animals such as carnuba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.
- (134)(149)"Web Spray Adhesive" means any aerosol adhesive which is not a mist spray adhesive or special purpose spray adhesive.
- (150) "Wood Cleaner" means a product labeled to clean wooden materials including but not limited to decking, fences, flooring, logs, cabinetry, and furniture. "Wood Cleaner" does not include "Dusting Aid," General Purpose Cleaner," "Furniture Maintenance Product," "Floor Wax Stripper," or products designed and labeled exclusively to preserve or color wood.
- (135)(151)"Wood Floor Wax" means wax-based products for use solely on wood floors.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

94509. Standards for Consumer Products

(a) Except as provided in Sections 94510 (Exemptions), 94511 (Innovative Products), 94514 (Variances), 94540 through 94555 (Alternative Control Plan), and 94567(a)(1) (Hairspray Credit Program), Title 17, California Code of Regulations, no person shall sell, supply, offer for sale, or manufacture for sale in California any consumer product which, at the time of sale or manufacture, contains volatile organic compounds in excess of the limits specified in the following Table of Standards after the specified effective dates.

Table of Standards ercent Volatile Organic Compound by Weight

Percent Volatile Organic Compour		
Product Category	Effective Date ¹	VOC Standard ²
	Date	JUNIO
Adhesive Removers*:		
Floor or Wall Covering Adhesive Remover		
1 1001 Of 47411 Octobring 7 and 55145 Telephone	12/31/2006	<u>5</u>
Gasket or Thread Locking Adhesive Remover	1990 and 1992 delty extra 600 400 100 600 100 600 100 600 100 100 100 1	हानुस्तरका कार प्रदेश का स्थापन का स्थापन का स्थापन का उपयोग को उसके की उसके की की स्थापन के की
	<u>12/31/2006</u>	<u>50</u>
General Purpose Adhesive Remover	12/31/2006	20
Specialty Adhesive Remover	12/3 1/2000	films Val eventualistis pp ggyannen manna en per pro ou ten razach dil daren en int
Specially Adresive Nemover	12/31/2006	<u>70</u>
[*See section 94509(n) for additional requirements	Penindra special consumptive Annual and are consumptions	Washington .
that apply to adhesive removers.]	WITH THE PROPERTY OF THE PROPE	
Adhesives *:	4 (4 10 5	~7 c
Aerosol	1/1/95	75
mist spray adhesives	1/1/2002	65
######################################	CONTRACTOR	NESS MEET AND A STORY COST OWN MEET ARTS COSTS AND TOUR COST ONLY TOUR COST OWN
web spray adhesives	1/1/2002	55
	क्षत प्रश्न साम क्षत्र के वाम प्रश्न कार्या का क्षत्र का प्रश्न का प्रश्न का प्रश्न का कार्या का कार्या का कार	点动物 高色 医甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲
special purpose spray adhesives mounting, automotive engine compartment, and		
flexible vinyl adhesives	1/1/2002	70
polystyrene foam and automobile headliner		
adhesives	1/1/2002	65
polyolefin and laminate repair/edgebanding	4/4/0000	00
adhesives	1/1/2002	60
[See 94509 (i)(i) , 94512(d), and 94513(d) for additional requirements that apply to aerosol		
adhesives.]		
	ens men ens ens ens ens ens ens ens ens ens e	van som sambled මට එට මට එට එට කට කර එය. කොමො එය එන කොහො
construction, panel, and floor covering**	1/1/95	40
	12/31/2002	15
contact	1/1/95	80
The first of a state of the sta	u a u u u u u u u u u u u u u u u u u u	
contact adhesive – general purpose	12/31/2006	<u>55</u>
	4 19 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
contact adhesive – special purpose	<u>12/31/2006</u>	<u>80</u>
See section 94509(n) for additional requirements		
that apply to contact adhesives.]		
	अमा नक्का करने करने करने करने करने बेटन करने करने करने करने करने करने करने करन	the state of the s

general purpose	1/1/95	10
	Grand Michael (Michael (Michael Institut in Langua (1990)	15000 (Spain Shipe) haske sales datas minor spice, edah, prima prome proto edah cooks minor union grap (spain
* See section 94510(i) for an exemption that applies to adhesives sold in containers of one fluid ounce or less.		
** See section 94509(k)(I) for the effective date of the		
VOC limit for certain types of "construction, panel, and floor covering adhesives."		
Aerosol Cooking Sprays	1/1/95	18
Air Fresheners*:		
Double phase aerosols	1/1/93 12/31/2004	30 25
	1/1/93	70
single phase aerosols	1/1/96	30
	**************************************	Single Single on a province were necessary of the comment of the c
dual purpose air fresheners/disinfectant aerosols	1/1/94	60
liquid/pump sprays	1/1/93	18
solids/ gels semisolid	1/1/93	3
[*See sections 94510(f) and 94510(g) for <u>an</u> exemptions that appl <u>yies</u> to certain air fresheners, and 94509(o) for additional requirements that apply		
to air fresheners.]		
Anti-static Product: Aerosol	12/31/2008	80
non-aerosol	12/31/2006	11
Automotive Brake Cleaners	1/1/97	50
	12/31/2002	45
Automotive Rubbing or Polishing Compounds	1/1/2005	17
Automotive Wax/Polish/Sealant/Glaze:		
all other forms	1/1/2005	15
hard paste waxes	1/1/2005	45
instant detailers	1/1/2001	3

Automotive Windshield Washer Fluids: Type "A" areas*	1/1/93	35
All other areas (all forms) Dilutable and Pre-Mixed ^{1/} See section 94508(a)(48)(19), section 94508(a) (19)(20), and section 94509(l)(m) for provisions that apply to Automotive Windshield Washer Fluids.	1/1/93 12/31/2002	10
* Type "A" areas include only the following: Del Norte, Shasta and Trinity Counties; the Great Basin Valley, Lake Tahoe, Mountain Counties, and Northeast Plateau Air Basins, as defined in Title 17, California Code of Regulations, Sections 60105, 60108, 60111, and 60113.		
Bathroom and Tile Cleaners: aerosols	1/1/94	7
all other forms	1/1/94	5
Bug and Tar Remover	1/1/2002	40
Carburetor or Fuel-injection Air Intake	1/1/95	75
Cleaners **	12/31/2002	45
** See section 94509(k)(l) for the effective date of the VOC limit for fuel-injection air intake cleaners.		See of the control of
Carpet and Upholstery Cleaner: Aerosols	1/1/2001	7
non-aerosols (dilutables)	1/1/2001	.1
non-aerosols (ready-to-use)	1/1/2001	3
Charcoal Lighter Material	See 94509(hj)	allerina successoria de comprese proper de proper a comprese de la comprese de comprese de la comprese de la c
Dusting Aids: Aerosol	1/1/95 1/1/97	35 25
all other forms	1/1/95	en esta est con con con con uno uno un con con con con con con con con con co
Electrical Cleaner*	12/31/2006	<u>45</u>
[*See section 94509(n) for additional requirements that apply to electrical cleaners.]	401046000	
Electronic Cleaner*	<u>12/31/2006</u>	<u>75</u>
[*See section 94509(n) for additional requirements that apply to electronic cleaners.]		

Engine Degreasers (all forms):	1/1/93	75
	1/1/96	50
aerosols	12/31/2004	35
	ARE COST DESCRIPTION TO STATE AND FIRST SIZE OF STATE AND COST COST COST COST	ලට අතුල ගැනු ගැනු ගැනු කතා කතා සහාධාරක කර සිටි ගේ ගෙන
non-aerosols	12/31/2004	5
Fabric Refresher:		
Aerosol	<u>12/31/2006</u>	<u>15</u>
non-aerosol	12/31/2006	<u>6</u>
Fabric Protectants	1/1/95	75
	1/1/97	60
Floor Polishes/Waxes:	market and the second s	
products for flexible flooring materials	1/1/94	7
products for nonresilient flooring	1/1/94	10
wood floor wax	1/1/94	90
Floor Wax Stripper:	See Section	
non-aerosols	94509(jk)	
Footware or Leather Care Product*:		
Aerosol	12/31/2006	<u>75</u>
solid	12/31/2006	<u>55</u>
all other forms	12/31/2006	15
[*See section 94509(n) for additional requirements		
that apply to footware or leather care products.]		
Furniture Maintenance Products:		<mark>Authoritätätä</mark> autherinaussil a man aterappenin motosaaten oven on term
Aerosols	1/1/94	25
	12/31/2004	17
all other forms (except solid/paste forms)	1/1/94	**************************************
General Purpose Cleaners	COLUMN CO	net for de la latin de Malacada a la Malada de la desarra la come uma una secona secona con come en come.
aerosols and non-aerosols:	1/1/94	10
non-aerosols	12/31/2004	mayera uni enco eas escretos em ema una ficuldad día cab-dab dife-filladad.
General Purpose Degreasers*:		
Aerosols	1/1/2002	50
non-aerosols	12/31/2004	4
[*See section 94509(n) for additional requirements		
that apply to general purpose degreasers.]		į

	NO DESCRIPTION OF THE PROPERTY	
Glass Cleaners:		
Aerosols	1/1/93	12
	1/1/93	8
non-aerosols		6
	1/1/96	
	12/31/2004	4
Graffiti Remover*:		
<u>Aerosols</u>	12/31/2006	<u>50</u>
	NON BOWN BOWN DIEGO DECK KELLEDING DIEG GEFENANTE BERÖRENDE HER NOVEMBER ZU DE NEUTO KEIN	CONTRACTOR CASE CASE CASE CASE CASE CASE CASE CASE
non-aerosols	12/31/2006	30
### At the Mark And	Control of	
[*See section 94509(n) for additional requirements		
that apply to graffiti removers.]		
	A IA ICA	16
Hair Mousses	1/1/94	i .
	12/31/2002	6
Hair Shine	1/1/2005	55
Hairsprays Hair Spray	1/1/93	80
pf name variablesses on the state of the s	6/1/99	55
Hair Styling Gels	1/1/94	6
	93.05.00.00	
Hair Styling Product	40/04/0000	
aerosols and pump sprays	12/31/2006	6
	THE THIN SELECT HER CONTROL TOTAL THE	
all other forms	12/31/2006	2
Heavy-duty Hand Cleaners or Soap	1/1/2005	8
Insect Repellents:		
Aerosols	1/1/94	65
Insecticides*:	NECE ANY THE SHARE SHARE PROPERTY AND ANY THE STATE OF THE STATE AND ANY THE STATE OF THE STATE	energical and representation of the second s
crawling bug (all forms):	1/1/95	40
Clawing bug (an ionno).	1/1/98	20
	1/1/30	20
CR APP CO AND TO CO	CONTRACTOR	क्का क्या अवस्था करता करता करता करता करता करता करता करत
aerosol crawling bug insecticides	12/31/2004	15
■ 日本日本 日本日本 日本日本 日本日本 日本日本 日本日本 日本日本 日本	ENTER COM COMP ACCES ACCES ACCES COMP ECON - COMP ACCES	विकास स्टाप्ट स्टाप्ट ने कार तथा हमार ने विकास स्टाप्ट स्टाप्ट स्टाप्ट स्टाप्ट स्टाप्ट स्टाप्ट स्टाप्ट स्टाप्ट
flea and tick	1/1/95	25
	HANNESS AND	eth ED CD (ED CD ED AN All Advants Advants Advants and common was and
flying bug (all forms):	1/1/95	35
	الله الدعة درجا الرحمة والمناطقة الله المناطقة الله المناطقة المناطقة الله الله المناطقة الله الله المناطقة ال	
aerosols	12/31/2003	25
		20
force	A IA IN P	we can transmit as accounts an energy to only the holodist off.
foggers	1/1/95	45
	between tendence and according to the enterior and each contact color (colors).	TO THE STATE OF TH
lawn and garden (ali forms)	1/1/95	20
	ARTS NEW HOW AND	מונה מונה להלו מונה להיה מונה איז אינה להיה במונה מונה מונה מונה מונה מונה מונה מונה
non-aerosol lawn and garden insecticides	12/31/2003	3
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wasp and hornet	1/1/2005	40
	COMMAND AND COMMAND CO	Annual General Annual Control
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* See sections 94510(g) and 94510(k) for exemptions		
that apply to certain insecticides.	The state of the s	
Laundry Prewash:		
aerosols/solids	1/1/94	22
all other forms	1/1/94	5
Laundry Starch Products	1/1/95	5
Metal Polish/Cleanser	1/1/2005	30
Multi-purpose Lubricant:		
(excluding solid or semisolid products)	1/1/2003	50
Nail Polish Removers	1/1/94	85
	1/1/96	75
	12/31/2004	0
Non-selective Terrestrial Herbicide:		
non-aerosols	1/1/2002	3
Oven Cleaners:		
aerosols/pump sprays	1/1/93	8
liquids	1/1/93	5
Paint Remover or Stripper	1/1/2005	50
Penetrant	1/1/2003	50
Personal Fragrance Products*:		
products with 20% or less fragrance	1/1/95	80
	1/1/99	75
products with more than 20% fragrance	1/1/95	70
	1/1/99	65
	mones second contact manual microst patents proved patents patents patents actually departs.	
* See sections 94510(h), 94510(j), and 94510(l) for exemptions that apply to personal fragrance products.		
Rubber and Vinyl Protectant:		
Aerosols	1/1/2005	10
non-aerosols	1/1/2003	3
Sealants and Caulking Compounds	12/31/2002	4
Shaving Creams	1/1/94	5
Shaving Gel	12/31/2006	74
	12/31/2009	4
Silicone-based Multi-purpose Lubricant:	1/1/2005	60
(excluding solid or semisolid products)	1/1/2005	60
Spot Remover:		and the state of t
A <u>a</u> erosols	1/1/2001	25
non-aerosols	1/1/2001	8

Tire Sealants and Inflators	12/31/2002	20
Toilet/Urinal Care Product:*		4.0
Aerosol	<u>12/31/2006</u>	<u>10</u>
non-aerosol	12/31/2006	enemo. 3 NW EERING ES JESUS EER - Brand ann die Germ Arbeit von enemon
[See section 94509 (o) for additional requirements		
that apply to Toilet/Urinal Care Products	CONTRACTOR	
Undercoating:		
Aerosols	1/1/2002	40
Wasp and Hornet Insecticide	1/1/2005	40
Wood Cleaner:		
Aerosol	12/31/2006	<u>17</u>
non-aerosol	12/31/2006	4

See section 94509(d)(e) for the effective date of the VOC standards for products registered under FIFRA, and section 94509(c) and (d) for the "Sell-through" allowed for products manufactured prior to the effective date of standards.

See section 94510(c) for an exemption that applies to fragrances in consumer products, and section 94510(d) for an exemption that applies to LVP-VOCs.

(b) Products that are diluted prior to use

- (1) Except for "Automotive Windshield Washer Fluids (Dilutable)," f For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent prior to use, the limits specified in subsection (a) shall apply to the product only after the minimum recommended dilution has taken place. For purposes of this subsection (b), "minimum recommended dilution" shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.
- (2) For consumer products for which the label, packaging, or accompanying literature states that the product should be diluted with any VOC solvent prior to use, the limits specified in subsection (a) shall apply to the product only after the maximum recommended dilution has taken place.
- (3) For "Automotive Windshield Washer Fluids (Dilutable)" for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent prior to use;
 - (A) the VOC limits specified in section 94509(a) shall apply to the product only after the minimum recommended dilution has taken place;
 (B) for the purpose of complying with the VOC limits specified in section

94509(a), different dilution instructions for "Type A areas" and other areas of California may be specified on the product label if the dilution instructions meet the following criteria:

- 1. The instructions are readily visible, and
- The instructions can be easily understood by the consumer, and
- 3. The instructions clearly specify the recommended dilutions to apply in "Type A areas" and in other areas of California, and

If the dilution instructions specified on the product label meet these criteria, the VOC limits specified in section 94509(a) shall apply to the product only after the minimum recommended dilution has taken place for the area in which the product is sold, supplied, or offered for sale.

- (c) Sell-through of products.
 - (1) Sell-through period. Notwithstanding the provisions of Section 94509(a) or 94509(j) (k), a consumer product manufactured prior to each of the effective dates specified for that product in the Table of Standards may be sold, supplied, or offered for sale for up to three years after each of the specified effective dates. This subsection (c) does not apply to:
 - (A) any consumer product that does not display on the product container or package the date on which the product was manufactured, or a code indicating such date., or
 - (B) any consumer product on which the manufacturer has used a code indicating the date of manufacture that is different than the code specified in section 94509(b)(2), but an explanation of the code has not been filed with the ARB Executive Officer by the deadlines specified in section 94509(c)(1) or section 94509(c)(2).
 - (C) Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene; these products are subject to the one-year sell-through period specified in section 94509(o).
 - (2) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product subject to the Table of Standards in section 94509 must notify the purchaser of the product in writing of the date on which the sell-through period for that product will end, provided, however, that this notification must be given only if all of the following conditions are met:
 - (A) the product is being sold or supplied to a distributor or retailer;
 (B) the sell-through period for the product will expire 6 months or less from the date the product is sold or supplied; and

(C) the product does not comply with the lowest VOC standard that apply on the date the sell-through period ends.

- (d)(e) Products registered under FIFRA. For those consumer products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. Section 136-136y), the effective date of the VOC standards specified in subsection (a) is one year after the date specified in the Table of Standards. For those consumer products that are registered under FIFRA, the three year period provided in subsection (c) shall also begin one year after the date specified in the Table of Standards.
- (e)(f) Products containing ozone-depleting compounds. For any consumer product for which standards are specified under subsection (a), no person shall sell, supply, offer for sale, or manufacture for sale in California any consumer product which contains any of the following ozone-depleting compounds:

CFC-11 (trichlorofluoromethane), CFC-12 (dichlorodifluoromethane),

CFC-113 (1,1,1-trichloro-2,2,2-trifluoroethane),

CFC-114 (1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane),

CFC-115 (chloropentafluoroethane), halon 1211 (bromochlorodifluoromethane),

halon 1301 (bromotrifluoromethane), halon 2402 (dibromotetrafluoroethane),

HCFC-22 (chlorodifluoromethane),

HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane),

HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane),

HCFC-141b (1,1-dichloro-1-fluoroethane), HCFC-142b

(1-chloro-1,1-difluoroethane), 1,1,1-trichloroethane, and carbon tetrachloride.

- (f)(g) The requirements of section 94509 (e)(f) shall not apply to any existing product formulation that complies with the Table of Standards or any existing product formulation that is reformulated to meet the Table of Standards, provided the ozone depleting compound content of the reformulated product does not increase.
- (g (h) The requirements of section 94509 (e)(f) shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than 0.01% by weight of the product.
- (h)(j) Requirements for charcoal lighter materials. The following requirements shall apply to all charcoal lighter material products as defined in section 94508(a)(26)(27):
 - (1) Regulatory Standards
 - (A) In all areas of California except the South Coast Air Quality Management District, no person shall sell, supply, or offer for sale after January 1, 1993 any charcoal lighter material product unless at the time of the transaction:
 - the manufacturer or distributor of the charcoal lighter material has been issued a currently effective certification pursuant to subsection (h)(i)(2).

- 2. the charcoal lighter material meets the formulation criteria and other conditions specified in the applicable Executive Order issued pursuant to subsection (h)(i)(2).
- 3. the product usage directions for the charcoal lighter material are the same as those provided to the Executive Officer pursuant to subsection (h) (i)(2)(C).
- (B) In the South Coast Air Quality Management District, the regulatory standards specified in subsection (h)(i)(1)(A) shall be applicable upon the effective date of this subsection.
- (2) Certification Requirements
 - (A) No charcoal lighter material formulation shall be certified under this subsection unless the applicant for certification demonstrates to the Executive Officer's satisfaction that the VOC emissions from the ignition of charcoal with the charcoal lighter material are less than or equal to 0.020 pound of VOC per start, using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol, dated February 27, 1991 (the "SCAQMD Rule 1174 Testing Protocol"). The provisions relating to LVP-VOC in sections 94508(a)(80)(91) and 94510(d) shall not apply to any charcoal lighter material subject to the requirements of sections 94509(a) and (h)(i).
 - (B) The Executive Officer may approve alternative test procedures which are shown to provide equivalent results to those obtained using the SCAQMD Rule 1174 Testing Protocol.

The application shall be in writing and shall include, at a minimum, the following:

- the results of testing conducted pursuant to the procedures specified in SCAQMD Rule 1174 Testing Protocol.
- 2. the exact text and/or graphics that will appear on the charcoal lighter material's principal display panel, label, and any accompanying literature. The provided material shall clearly show the usage directions for the product. These directions shall accurately reflect the quantity of charcoal lighter material per pound of charcoal that was used in the SCAQMD Rule 1174 Testing Protocol for that product, unless:
 - the charcoal lighter material is intended to be used in fixed amounts independent of the amount of charcoal used, such as certain paraffin cubes, or

- ii) the charcoal lighter material is already incorporated into the charcoal, such as certain "bag light," "instant light" or "match light" products.
- 3. For a charcoal lighter material which meets the criteria specified in subsection (h)(i)(2)(B)2.i, the usage instructions provided to the Executive Officer shall accurately reflect the quantity of charcoal lighter material used in the SCAQMD Rule 1174 Testing Protocol for that product.
- 4. Any physical property data, formulation data, or other information required by the Executive Officer for use in determining when a product modification has occurred and for use in determining compliance with the conditions specified on the Executive Order issued pursuant to section (h)(i)(2).
- (C) Within 30 days of receipt of an application, the Executive Officer shall advise the applicant in writing either that it is complete or that specified additional information is required to make it complete. Within 30 days of receipt of additional information, the Executive Officer shall advise the applicant in writing either that the application is complete, or that specified additional information or testing is still required before it can be deemed complete.
- (D) If the Executive Officer finds that an application meets the requirements of this subsection (h)(i) then he or she shall issue an Executive Order certifying the charcoal lighter material formulation and specifying such conditions as are necessary to insure that the requirements of this subsection (h)(j) are met. The Executive Officer shall act on a complete application within 90 days after the application is deemed complete.

(3) Notice of Modifications

For any charcoal lighter material for which certification has been granted pursuant to subsection (h)(j)(2), the applicant for certification shall notify the Executive Officer in writing within 30 days of: (i) any change in the usage directions, or (ii) any change in product formulation, test results, or any other information submitted pursuant to subsection (h)(j)(2) which may result in VOC emissions greater than 0.020 pound of VOC per start.

(4) Revocation of Certification

If the Executive Officer determines that any certified charcoal lighter material formulation results in VOC emissions from the ignition of charcoal which are greater than 0.020 pound of VOC per start, as determined by the SCAQMD Rule 1174 Testing Protocol and the statistical analysis procedures contained therein, the Executive Officer shall revoke or modify the certification as is necessary to assure that the charcoal lighter material will result in VOC

emissions of less than or equal to 0.020 pound of VOC per start. The Executive Officer shall not revoke or modify the prior certification without first affording the applicant for the certification an opportunity for a hearing in accordance with the procedures specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 1, Article 4 (commencing with section 60040), to determine if the certification should be modified or revoked.

- (5) Notwithstanding any other provision of this subsection 94509(h)(j), charcoal lighter material products manufactured prior to January 1, 1993, may be sold, supplied, or offered for sale until July 1, 1994, in all areas of California except the South Coast Air Quality Management District. Charcoal lighter material products subject to SCAQMD Rule 1174 and sold, supplied, or offered for sale in the South Coast Air Quality Management District shall meet the requirements of section 94509(h)(j) upon the effective date of this subsection, regardless of the date on which the products were manufactured.
- (i) (j) Requirements for aerosol adhesives.
 - (1) As specified in Health and Safety Code section 41712(h)(2), the standards for aerosol adhesives apply to all uses of aerosol adhesives, including consumer, industrial, and commercial uses. Except as otherwise provided in sections 94509(c), 94510, 94511, and 94514, no person shall sell, supply, offer for sale, use or manufacture for sale in California any aerosol adhesive which, at the time of sale, use, or manufacture, contains VOCs in excess of the specified standard.
 - (2)(A) In order to qualify as a "Special Purpose Spray Adhesive" the product must meet one or more of the definitions for "Special Purpose Spray Adhesive" specified in section 94508(a)(134)(120), but if the product label indicates that the product is suitable for use on any substrate or application not listed in section 94508(a)(120)(Special Purpose Spray Adhesive) one of the definitions for "Special Purpose Spray Adhesive." then the product shall be classified as either a "Web Spray Adhesive" or a "Mist Spray Adhesive."
 - (B) If a product meets more than one of the definitions specified in section 94508(a)(134)(120) for "Special Purpose Spray Adhesive", and is not classified as a "Web Spray Adhesive" or "Mist Spray Adhesive" under subsection (2)(A), then the VOC limit for the product shall be the lowest applicable VOC limit specified in section 94509(a).
 - (3) Effective 1/1/2002, no person shall sell, supply, offer for sale, or manufacturer for use in California any aerosol adhesive which contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene, except than an aerosol adhesive manufactured before 1/1/2002 may be sold, supplied, or offered for sale until 1/1/2005, so long

- as the product container or package displays the date on which the product was manufactured, or a code indicating such date.
- (4) All aerosol adhesives must comply with the labeling requirements specified in section 94512(d), and all manufacturers and responsible parties for aerosol adhesives must comply with the special reporting requirements specified in section 94513(d).
- (j)(k) Requirements for Floor Wax Strippers. After an effective date of January 1, 2002, no person shall sell, supply, offer for sale, or manufacture for use in California any floor wax stripper unless the following requirements are met:
 - (1) The label of each non-aerosol floor wax stripper must specify a dilution ratio for light or medium build-up of polish that results in an as-used VOC concentration of 3 percent by weight or less.
 - (2) If a non-aerosol floor wax stripper is also intended to be used for removal of heavy build-up of polish, the label of that floor wax stripper must specify a dilution ratio for heavy build-up of polish that results in an as-used VOC concentration of 12 percent by weight or less.
 - (3) The terms "light build-up", "medium build-up "or "heavy build-up" are not specifically required, as long as comparable terminology is used.
- (k)(i) Effective dates of the VOC limits for "Carburetor or Fuel-injection Air Intake Cleaners" and "Construction, Panel, and Floor Covering Adhesives." The definitions for the product categories of "Carburetor or Fuel-injection Air Intake Cleaners" and "Construction, Panel, and Floor Covering Adhesives" were modified as part of the "Mid-term Measures II" rulemaking action that was considered by the Board in October 1999. As a result of these modifications, certain types of consumer products were included in these definitions that had not previously been included. For those consumer products that were included in these definitions for the first time as a result of the "Mid-term Measures II" rulemaking action, the VOC limits (in section 94509(a)) applicable to these newly included products shall not become legally effective until December 31, 2002.
- (+)(m) Automotive Windshield Washer Fluids. The provisions of subsection 94509(b)(1) shall not apply to "Automotive Windshield Washer Fluid (Pre-Mixed)" as defined in section 94508(a)(21)(19) (Automotive Windshield Washer Fluid).
- (n) Requirements for Adhesive Removers, Contact Adhesives, Electrical Cleaners, Electronic Cleaners, Footwear or Leather Care Products, General Purpose Degreasers, and Graffiti Removers.

- (1) Except at provided below in sections 94509(n)(2) and (n)(4), effective December 31, 2006, no person shall sell, supply, offer for sale, or manufacture for use in California any Adhesive Remover, Contact Adhesive, Electrical Cleaner, Electronic Cleaner, Footwear or Leather Care Product, General Purpose Degreaser, or Graffiti Remover that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.
- (2) Sell through of Products. Adhesive Removers, Contact Adhesives, Electrical Cleaners, Electronic Cleaners, Footwear or Leather Care Products, General Purpose Degreasers, and Graffiti Removers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before December 31, 2006, may be sold, supplied, or offered for sale until December 31, 2009, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date.
- (3) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product identified above in section 94509(n)(1) must notify the purchaser of the product in writing that the sell-through period for that product will end on December 31, 2009, provided, however, that this notification must be given only if both of the following conditions are met:

 (A) the product is sold or supplied to a distributor or retailer; and
 - (A) the product is sold or supplied to a distributor or retailer; and(B) the product is sold or supplied on or after June 31, 2009.
- (4) Impurities. The requirements of section 94509(n)(1) and (n)(3) shall not apply to any Contact Adhesive, Electrical Cleaner, Electronic Cleaner, Footwear or Leather Care Product, General Purpose Degreaser, or Graffiti Remover containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01% by weight.
- (o) Requirements for Solid Air Fresheners and Toilet/Urinal Care Products.
 - (1) Effective December 31, 2006, no person shall sell, supply, offer for sale, or manufacture for use in California any Solid Air Fresheners or Toilet/Urinal Care Products that contain para-dichlorobenzene, except that Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene and were manufactured before December 31, 2006 may be sold, supplied, or offered for sale until December 31, 2007, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date.
 - (2) Notification for products sold during the sell-through period. Any person who sells or supplies any Solid Air Freshener or Toilet/Urinal Care Product that contains para-dichlorobenzene must notify the purchaser of the product in writing that the sell-through period for the product will end on December 31, 2007,

provided, however, that this notification must be given only if both of the following conditions are met:

(A) the product is sold or supplied to a distributor or retailer, and

(B) the product is sold or supplied on or after June 31, 2007.

NOTE: Authority cited: Sections 39600, 39601, <u>39650, 39658,</u> 39659, 39666, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 39650, 39656, 39658, 39659, 39666, 40000, and 41712, Health and Safety Code.

94510. Exemptions

- (a) This article shall not apply to any consumer product manufactured in California for shipment and use outside of California.
- (b) The provisions of this article shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in California a consumer product that does not comply with the VOC standards specified in Section 94509, as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of California, and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed to California. This subsection (b) does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in California.
- (c) The VOC limits specified in Section 94509(a) shall not apply to fragrances up to a combined level of 2 percent by weight contained in any consumer product.
- (d) The VOC limits specified in Section 94509(a) shall not apply to any LVP-VOC.
- (e) The requirements of Section 94512(b) shall not apply to consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. Section 136/136y).
- (f) The VOC limits specified in Section 94509(a) shall not apply to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under Section 94508 or exempted under Section 94510(d).
- (g) The VOC limits specified in Section 94509(a) shall not apply to air fresheners and insecticides containing at least 98% paradichlorobenzene.
- (h) The VOC limits specified in Section 94509(a) shall not apply to:
 - (1) existing personal fragrance products or personal fragrance products in development on or before April 1, 1992, provided that both (i) the registration data specified in section 94513 is submitted for every such product by the date

specified in section 94513(a), or prior to July 1, 1993, whichever date occurs later, and (ii) such product is sold in California prior to January 1, 1994. For the purposes of this subsection, a product "in development" means:

- (A) a product which a fragrance materials manufacturer is designing at the request of a personal fragrance product manufacturer, or
- (B) a product which is the subject of a written marketing profile or other documentation authorizing the creation and marketing of the product.
- (2) Personal fragrance products in development may be registered to qualify for this exemption under hypothetical trade names or pseudonyms, provided that the actual trade name is supplied to the Executive Officer within 30 days of marketing such products, or January 1, 1994, whichever occurs first.
- (i) The VOC limits specified in Section 94509(a) shall not apply to adhesives sold in containers of 1 fluid ounce or less.
- (j) The VOC limits specified in Section 94509(a) shall not apply to any VOC which is a fragrance in a personal fragrance product.
- (k) The VOC limits specified in Section 94509(a) shall not apply to bait station insecticides. For the purpose of this section, bait station insecticides are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5 percent (%) active ingredients.
- (I) The 1/1/99 VOC limits specified in Section 94509(a) for personal fragrance products shall not apply to such products which have been sold in California prior to 1/1/99.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

[No changes are proposed to section 94511. "Innovative Products"]

94512. Administrative Requirements

(a) Most Restrictive Limit.

(1) Products Manufactured Before January 1, 2007. Notwithstanding the definition of "product category" in Section 94508, if anywhere on the principal display panel of any consumer product manufactured before January 1, 2007, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in Section 94509(a), then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners.

(2) Products Manufactured on or After January 1, 2007. Notwithstanding the definition of "product category" in Section 94508, if anywhere on the container or packaging of any consumer product manufactured on or after January 1, 2007, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in Section 94509(a), then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners.

(b) Code-Product Dating.

- (1) Each manufacturer of a consumer product subject to Section 94509 shall clearly display on each consumer product container or package, the day, month, and year on which the product was manufactured, or a code indicating such date.
- (2) A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of section 94509(c)(1), if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD = year year day day day

Where: "YY" = two digits representing the year in which the product was manufactured, and

"DDD" = three digits representing the day of the year on which the product was manufactured, with "001" representing the first day of the year, "002" representing the second day of the year, and so forth (i.e. the "Julian date")

- (3) This date or code shall be displayed on each consumer product container or package no later than twelve months prior to the effective date of the applicable standard specified in Section 94509. No person shall erase, alter, deface or otherwise remove or make illegible any date or code date from any regulated product container without the express authorization of the manufacturer.
- (4) For products manufactured on or after January 1, 2006, the date or code shall be displayed on the product container such that it is readily observable without irreversibly disassembling any portion of the product container or packaging. For the purposes of this subsection, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.
- (5) The requirements of this provision subsection (b) shall not apply to:
 - (1) (A) personal fragrance products of 2 milliliters or less, which are offered to consumers free of charge for the purpose of sampling the product; or

(2) (B) products containing no VOCs (as defined in section 94508), or containing VOCs at 0.10% by weight or less.

(c) Additional Product Dating Requirements

- (1) If a manufacturer uses a code indicating the date of manufacture, for any consumer product subject to section 94509 an explanation of the code must be filed with the Executive Officer of the ARB no later than twelve months prior to the effective date of the applicable standard specified in section 94509. Thereafter, manufacturers using a code must file an explanation of the code with the Executive Officer on an annual basis, beginning in 2006. The explanation of the code must be received by the Executive Officer on or before January 31st of each year, with the first explanation due on or before January 31, 2006.
- (2) If a manufacturer changes any code indicating the date of manufacture for any consumer product subject to subsection (c)(1), an explanation of the modified code must be received by the Executive Officer before any products displaying the modified code are sold, supplied, or offered for sale in California.
- (3) No person shall erase, alter, deface, or otherwise remove or make illegible any date or code indicating the date of manufacture from any regulated product container without the express authorization of the manufacturer.
- (4) Codes indicating the date of manufacture are public information and may not be claimed as confidential.
- (d) Additional Labeling Requirements for Aerosol Adhesives. <u>Adhesive Removers</u>, <u>Electronic Cleaner</u>, <u>Electrical Cleaner</u>, <u>Energized Electrical Cleaner</u>, and <u>Contact</u> Adhesives.
 - (1) In addition to the requirements specified in subsections (a), (b), and (c), both the manufacturer and responsible party for each aerosol adhesive, adhesive remover, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesive, product subject to this article shall ensure that all products clearly display the following information on each product container which is manufactured on or after the effective date for the category specified in section 94509(a) 1/1/2002;
 - (A) The aerosol adhesive <u>product</u> category as specified in section 94509(a) or an abbreviation of the category shall be displayed;
 - (B)

 1. The applicable VOC standard for the product that is specified in section 94509(a), except for Energized Electrical Cleaner, expressed as a percentage by weight, shall be displayed unless the product is included in an alternative control plan approved by

- the Executive Officer, as provided in Article 4. Section 94540-94555, Title 17, California Code of Regulations, and the product exceeds the applicable VOC standard;
- 2. If the product is included in an alternative control plan approved by the Executive Officer, and the product exceeds the applicable VOC standard specified in section 94509(a), the product shall be labeled with the term "ACP" or "ACP product";
- (C) If the product is classified as a special purpose spray adhesive, the applicable substrate and/or application or an abbreviation of the substrate/application that qualifies the product as special purpose shall be displayed;
- (D) If the manufacturer or responsible party uses an abbreviation as allowed by the subsection 94512(d), and explanation of the abbreviation must be filed with the Executive Officer before the abbreviation is used.
- (2) The information required in section 94512(d)(1), shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging. For the purposes of this subsection, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.
- (3) No person shall remove, alter, conceal, or deface the information required in section 94512(d)(1) prior to final sale of the product.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

94513. Reporting Requirements

- (a) Upon 90 days written notice, the Executive Officer may require any responsible party to report information for any consumer product or products the Executive Officer may specify including, but not limited to, all or part of the following information: specified in the following subsections (a)(1) through (a)(12). If the responsible party does not have or does not provide the information requested by the Executive Officer, the Executive Officer may require the reporting of this information by the person that has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager.
 - (1) the <u>company</u> name, <u>of the responsible party and the party's</u> address, telephone number, and designated contact person;

- (2) any claim of confidentiality made pursuant to Title 17, California Code of Regulations, Section 91011;
- (3) the product brand name for each consumer product subject to registration and upon request by the Executive Officer, the product label;
- (4) the product category to which the consumer product belongs;
- (5) the applicable product form(s) listed separately;
- (6) an identification of each product brand name and form as a "Household Product", "I&I Product", or both;
- (7) separate California sales in pounds per year, to the nearest pound, and the method used to calculate California sales for each product form;
- (8) for registrations information submitted by two multiple companies, an identification of the each company which is submitting relevant data separate from that submitted by the responsible party. All registration information from both all companies shall be submitted by the date specified in Section 94513(a);
- (9) for each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest one-tenth of a percent (0.1%):
 - (A) Total Table B Compounds
 - (B) Total LVP-VOCs that are not fragrances
 - (C) Total All Other Carbon-Containing Compounds that are not fragrances
 - (D) Total All Non-Carbon-Containing Compounds
 - (E) Total Fragrance
 - (F) For products containing greater than two percent by weight fragrance, but excluding "personal fragrance products":
 - (i) the percent of fragrance that are LVP-VOCs, and
 - (ii) the percent of fragrance that are all other carbon-containing compounds
 - (G) For "personal fragrance products", the density of the fragrance
 - (H) Total Paradichlorobenzene
- (10) for each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:
 - (A) Each Table B Compound
 - (B) Each LVP-VOC that is not a fragrance
- (11) if applicable, the weight percent comprised of propellant for each product;

- (12) if applicable, an identification of the type of propellant (Type A, Type B, Type C, or a blend of the different types);
- (b) In addition to the requirements of section 94513(a)(10), the responsible party shall report or shall arrange to have reported to the Executive Officer the net percent by weight of each ozone-depleting compound which is (1) listed in section 94509(ef) and (2) contained in a product subject to registration reporting under section 94513(a) in any amount greater than 0.1 percent by weight.
- (c) All information submitted by responsible parties any person pursuant to Section 94513 shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Sections 91000-91022.
- (d) Special Reporting Requirements for Aerosol Adhesives

On or before March 31, 2004, all responsible parties for aerosol adhesives shall report to the Executive Officer the following information for products sold or offered for sale in California:

- data regarding product sales and composition for the year 2003, including the information listed in Section 94513(a), and any other information that the Executive Officer may specify; and
- (2) a written update of the research and development efforts undertaken to achieve VOC limits lower than the limits specified in section 94509(a). The written update must include detailed information about the raw materials (solvents, propellants, resins, and polymers) and hardware (valves, actuators, cans) used in product reformulation, the testing protocols used, the results of the testing, and the cost of reformulation efforts.
- (3) On or before December 31, 2003, the Executive Officer shall notify responsible parties in writing that they are to submit aerosol adhesive product and research data by March 31, 2004.
- (e) Special Reporting Requirements for Consumer Products that Contain Perchloroethylene or Methylene Chloride:
 - (1) The requirements of this subsection shall apply to all responsible parties for:
 - (A) consumer products that are subject to section 94509(a) and contain perchloroethylene or methylene chloride, <u>and</u>
 - (B) Energized Electrical Cleaners as defined in section 94508(a) (47), that contain perchloroethylene or methylene chloride. For the purposes of this subsection, a product "contains perchloroethylene or methylene chloride" if the product contains 1.0 percent or more by weight (exclusive of the container or packaging) of either perchloroethylene or methylene chloride.

- (2) For each consumer product that contains perchloroethylene or methylene chloride, the responsible party shall report the following information for products sold in California during each calendar year, beginning with the year 2000, and ending with the year 2010.
 - (A) the product brand name and a copy of the product label with legible usage instructions:
 - (B) the product category to which the consumer product belongs;
 - (C) the applicable product form(s) (listed separately);
 - (D) for each product form listed in (C), the total sales in California during the calendar year to the nearest pound (exclusive of the container or packaging), and the method used for calculating the California sales;
 - (E) the weight percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the consumer product;
- (3) The information specified in subsection 94513(e)(2) shall be reported for each calendar year by March 1 of the following year. The first report shall be due on March 1, 2001, for calendar year 2000. A new report is due on March 1 of each year thereafter, until March 1, 2011, when the last report is due.
- (4) Upon request, the Executive Officer shall make the perchloroethylene information submitted pursuant to this subsection available to publicly owned treatment works in California, in accordance with the procedures for handling of confidential information specified in Title 17, California Code of Regulations, sections 91000-91022.
 - (A) On or before July 1, 2002, the Executive Officer shall evaluate the information, along with data on influent and effluent levels of perchloroethylene as reported by publicly-owned treatment works personnel and any other relevant information, to determine if it is likely that publiclyowned treatment works are experiencing increased levels of perchloroethylene, relative to 1996 levels, that can be attributed to consumer products which contain perchloroethylene.
 - (B) If the Executive Officer determines that it is likely that increased perchloroethylene levels at the publicly-owned treatment works are caused by increased levels of perchloroethylene in consumer products subject to this regulation, then the Executive Officer shall, in conjunction with the publiclyowned treatment works and other appropriate parties, implement measures which are feasible, appropriate, and necessary for reducing perchloroethylene levels at the publicly-owned treatment works.

NOTE: Authority cited: Sections 39600, 39601, 41511, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, 41511, and 41712, Health and Safety Code.

[No changes are proposed to section 94514. "Variances"]

94515. Test Methods

- (a)(1) Testing to determine compliance with the requirements of this article, shall be performed using Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products, adopted September 25, 1997 and as last amended on September 3, 1999 [Date of Amendment], which is incorporated herein by reference. Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval of the Executive Officer.
- (2) In sections 3.5, 3.6, and 3.7 of Air Resources Board (ARB) Method 310, a process is specified for the "Initial Determination of VOC Content" and the "Final Determination of VOC Content". This process is an integral part of testing procedure set forth in ARB Method 310, and is reproduced below:

Sections 3.5, 3.6, and 3.7 of Air Resources Board Method 310

- 3.5 Initial Determination of VOC Content. The Executive Officer will determine the VOC content pursuant to sections 3.2 and 3.3. Only those components with concentrations equal to or greater than 0.1 percent by weight will be reported.
 - 3.5.1 Using the appropriate formula specified in section 4.0, the Executive Officer will make an initial determination of whether the product meets the applicable VOC standards specified in ARB regulations. If initial results show that the product does not meet the applicable VOC standards, the Executive Officer may perform additional testing to confirm the initial results.
 - 3.5.2 If the results obtained under section 3.5.1 show that the product does not meet the applicable VOC standards, the Executive Officer will request the product manufacturer or responsible party to supply product formulation data. The manufacturer or responsible party shall supply the requested information. Information submitted to the ARB Executive Officer may be claimed as confidential; such information will be handled in accordance with the confidentiality procedures specified in Title 17, California Code of Regulations, sections 91000 to 91022.

- 3.5.3 If the information supplied by the manufacturer or responsible party shows that the product does not meet the applicable VOC standards, then the Executive Officer will take appropriate enforcement action.
- 3.5.4 If the manufacturer or responsible party fails to provide formulation data as specified in section 3.5.2, the initial determination of VOC content under this section 3.5 shall determine if the product is in compliance with the applicable VOC standards. This determination may be used to establish a violation of ARB regulations.
- 3.6 Determination of the LVP-VOC status of compounds and mixtures. This section does not apply to antiperspirant and deodorants or aerosol coating products because there is no LVP-VOC exemption for these products.
 - 3.6.1 Formulation data. If the vapor pressure is unknown, the following ASTM methods may be used to determine the LVP-VOC status of compounds and mixtures: ASTM D 86-96 01 (April 10, 1996) ASTM D 850-93 00 (April 15, 1993), ASTM D 1078-97 01 (July 10, 1997), ASTM D 2879-97 (April 10, 1997), as modified in Appendix B to this Method 310, ASTM D 2887-97 01 (April 10, 1997) and ASTM E 1719-7 (March 10, 1997).
 - 3.6.2 LVP-VOC status of "compounds" or "mixtures." The Executive Officer will test a sample of the LVP-VOC used in the product formulation to determine the boiling point for a compound or for a mixture. If the boiling point exceeds 216°C, the compound or mixture is an LVP-VOC. If the boiling point is less than 216°C, then the weight percent of the mixture which boils above 216°C is an LVP-VOC. The Executive Officer will use the nearest 5 percent distillation cut that is greater than 16°C as determined under 3.6.1 to determine the percentage of the mixture qualifying as an LVP-VOC.
 - 3.6.3 Reference method for identification of LVP-VOC compounds and mixtures. If a product does not qualify as an LVP-VOC under 3.6.2, the Executive Officer will test a sample of the compound or mixture used in a products formulation utilizing one or both of the following: ASTM D 2879-97, as modified in Appendix B to this Method 310, and ASTM E 1719-97, to determine if the compound or mixture meets the requirements of Title 17, CCR, section 94508(7891)(A).
- 3.7 Final Determination of VOC Content. If a product's compliance status is not satisfactorily resolved under sections 3.5 and 3.6, the Executive Officer will conduct further analyses and testing as necessary to verify the formulation data.
 - 3.7.1 If the accuracy of the supplied formulation data is verified and the product sample is determined to meet the applicable VOC standards,

then no enforcement action for violation of the VOC standards will be taken.

- 3.7.2 If the Executive Officer is unable to verify the accuracy of the supplied formulation data, then the Executive Officer will request the product manufacturer or responsible party to supply information to explain the discrepancy.
- 3.7.3 If there exists a discrepancy that cannot be resolved between the results of Method 310 and the supplied formulation data, then the results of Method 310 shall take precedence over the supplied formulation data. The results of Method 310 shall then determine if the product is in compliance with the applicable VOC standards, and may be used to establish a violation of ARB regulations.
- (b) VOC content determinations using product formulation and records. Testing to determine compliance with the requirements of this article may also be demonstrated through calculation of the VOC content from records of the amounts of constituents used to make the product pursuant to the following criteria:
 - (1) Compliance determinations based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records must be kept for at least three years.
 - (2) For the purposes of this section 94515(b), the VOC content shall be calculated according to the following equation:

VOC Content =
$$\frac{B-C}{A} \times 100$$

where.

A = total net weight of unit (excluding container and packaging)

B = total weight of all VOCs, as defined in Section 94508(a), per unit

C = total weight of VOCs exempted under Section 94510, per unit

(3) If product records appear to demonstrate compliance with the VOC limits, but these records are contradicted by product testing performed using ARB Method 310, the results of ARB Method 310 shall take precedence over the product records and may be used to establish a violation of the requirements of this article.

- (c) Determination of liquid or solid. Testing to determine whether a product is a liquid or solid shall be performed using ASTM D4359-90 (May 25, 1990), which is incorporated by reference herein.
- (d) Compliance determinations for charcoal lighter material products. Testing to determine compliance with the certification requirements for charcoal lighter material shall be performed using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 28, 1991), which is incorporated by reference herein.
- (e) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86-90 01 (Sept. 28, 1990), which is incorporated by reference herein.
- (f) Fragrance content determinations for personal fragrance products. Testing to determine the percent by weight of fragrance in personal fragrance products shall be performed according to the Association of Official Analytical Chemists (AOAC) Official Method of Analysis No. 932.11, 1990, "Essential Oil in Flavor Extracts and Toilet Preparations, Babcock Method" (AOAC Official Methods of Analysis, 15th Edition, 1990), which is incorporated by reference herein.
- (g) No person shall create, alter, falsify, or otherwise modify records in such a way that the records do not accurately reflect the constituents used to manufacture a product, the chemical composition of the individual product, and any other test, processes, or records used in connection with product manufacture.

NOTE: Authority cited: Sections 39600, 39601, 39607, 41511, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 39607, 40000, 41511, and 41712, Health and Safety Code.

[No changes are proposed to sections 94516. "Severability" and 94517. "Federal Enforceability"]

PROPOSED AMENDMENTS TO THE REGULATION FOR REDUCING VOLATILE ORGANIC COMPOUND EMISSIONS FROM ANTIPERSPIRANTS AND DEODORANTS

[Note: Proposed amendments are shown in <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions.]

SUBCHAPTER 8.5. CONSUMER PRODUCTS

Article 1. Antiperspirants and Deodorants

[No changes are proposed to section 94500.]

Amend title 17, California Code of Regulations, section 94501 and section 94506 as follows:

94501. Definitions.

For the purpose of this article, the following definitions apply:

- (a) "Aerosol Product" means a pressurized spray system that dispenses antiperspirant or deodorant ingredients.
- (b) "Antiperspirant" means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population.
- (c) "Colorant" means any substance or mixture of substances, the primary purpose of which is to color or modify the color of something else.
- (d) "Deodorant" means:
 - 1) for products manufactured before January 1, 2006: any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria which cause the decomposition of perspiration.
 - 2) for products manufactured on or after January 1, 2006: any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent and/or minimize odor.

- (e) "Executive Officer" means the Executive Officer of the Air Resources Board, or his or her delegate.
- (f) "Fragrance" means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm of Hg at 20°C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.
- (g) "High Volatility Organic Compound (HVOC)" means any organic compound that exerts a vapor pressure greater than 80 millimeters of Mercury (mm Hg) when measured at 20°C.
- (h) "Manufacturer" means any person who imports, manufacturers, assembles, produces, packages, repackages, or relabels an antiperspirant or deodorant.
- (i) "Medium Volatility Organic Compound (MVOC)" means any organic compound that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20°C.
- (j) "Non-aerosol Product" means any antiperspirant or deodorant that is not dispensed by a pressurized spray system.
- (k) "Roll-on Product" means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.
- (I) "Stick Product" means any antiperspirant or deodorant that contains active ingredients in a solid matrix form, and that dispenses the active ingredients by frictional action on the affected area.
- (m) "Volatile Organic Compound (VOC)" means any compound containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:
 - (1) methane,
 methylene chloride (dichloromethane),
 1,1,1-trichloroethane (methyl chloroform),
 trichlorofluoromethane (CFC-11),
 dichlorodifluoromethane (CFC-12),
 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113),
 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114),
 chloropentafluoroethane (CFC-115),
 chlorodifluoromethane (HCFC-22),
 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123),
 1,1-dichloro-1-fluoroethane (HCFC-141b),
 1-chloro-1,1-difluoroethane (HCFC-142b),

2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), trifluoromethane (HFC-23), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1,2-tetrafluoroethane (HFC-134a), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), cyclic, branched, or linear completely methylated siloxanes, the following classes of perfluorocarbons:

- (A) cyclic, branched, or linear, completely fluorinated alkanes;
- (B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds to carbon and fluorine, and
- (2) the following low-reactive organic compounds which have been exempted by the U.S. EPA:

acetone, ethane, methyl acetate, parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene).

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

[No changes are proposed to sections 94502-94505.]

Amend section 94506 as follows:

94506. Test Methods

- (a)(1) Testing to determine the volatile organic compound of an antiperspirant or deodorant, or to determine compliance with the requirements of this article, shall be performed using Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products, adopted September 25, 1997 and as last amended on September 3, 1999 [Date of Amendment], which is incorporated herein by reference. Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval of the Executive Officer.
 - (2) In sections 3.5 and 3.7 of Air Resources Board (ARB) Method 310, a process is specified for the "Initial Determination of VOC Content" and the "Final

Determination of VOC Content". This process is an integral part of testing procedure set forth in ARB Method 310, and is reproduced below:

Sections 3.5 and 3.7 of Air Resources Board Method 310

- 3.5 Initial Determination of VOC Content. The Executive Officer will determine the VOC content pursuant to sections 3.2 and 3.3. Only those components with concentrations equal to or greater than 0.1 percent by weight will be reported.
 - 3.5.1 Using the appropriate formula specified in section 4.0, the Executive Officer will make an initial determination of whether the product meets the applicable VOC standards specified in ARB regulations. If initial results show that the product does not meet the applicable VOC standards, the Executive Officer may perform additional testing to confirm the initial results.
 - 3.5.2 If the results obtained under section 3.5.1 show that the product does not meet the applicable VOC standards, the Executive Officer will request the product manufacturer or responsible party to supply product formulation data. The manufacturer or responsible party shall supply the requested information. Information submitted to the ARB Executive Officer may be claimed as confidential; such information will be handled in accordance with the confidentiality procedures specified in Title 17, California Code of Regulations, sections 91000 to 91022.
 - 3.5.3 If the information supplied by the manufacturer or responsible party shows that the product does not meet the applicable VOC standards, then the Executive Officer will take appropriate enforcement action.
 - 3.5.4 If the manufacturer or responsible party fails to provide formulation data as specified in section 3.5.2, the initial determination of VOC content under this section 3.5 shall determine if the product is in compliance with the applicable VOC standards. This determination may be used to establish a violation of ARB regulations.
- 3.7 Final Determination of VOC Content. If a product's compliance status is not satisfactorily resolved under sections 3.5 and 3.6, the Executive Officer will conduct further analyses and testing as necessary to verify the formulation data.
 - 3.7.1 If the accuracy of the supplied formulation data is verified and the product sample is determined to meet the applicable VOC

- standards, then no enforcement action for violation of the VOC standards will be taken.
- 3.7.2 If the Executive Officer is unable to verify the accuracy of the supplied formulation data, then the Executive Officer will request the product manufacturer or responsible party to supply information to explain the discrepancy.
- 3.7.3 If there exists a discrepancy that cannot be resolved between the results of Method 310 and the supplied formulation data, then the results of Method 310 shall take precedence over the supplied formulation data. The results of Method 310 shall then determine if the product is in compliance with the applicable VOC standards, and may be used to establish a violation of ARB regulations.
- (b) Testing to determine compliance with the requirements of this article may also be demonstrated through calculation of the volatile organic compound content from records of the amounts of constituents used to make the product. Compliance determination based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records must be kept for at least three years.
- (c) No person shall create, alter, falsify, or otherwise modify records in such a way that the records do not accurately reflect the constituents used to manufacture a product, the chemical composition of the individual product, and any other tests, processes, or records used in connection with product manufacture.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

[No changes are proposed to section 94506.5]

PROPOSED AMENDMENTS TO THE REGULATION FOR REDUCING THE OZONE FORMED FROM AEROSOL COATING PRODUCT EMISSIONS

[Note: Proposed amendments are shown in <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions.]

Amend title 17, California Code of Regulations, as follows:

[No changes are proposed to sections 94520- 94525.]

Amend section 94526 as follows:

94526. Test Methods.

Compliance with the requirements of this article shall be determined by using the following test methods, which are incorporated by reference herein. Alternative test methods which are shown to accurately determine the VOC content, ingredient name and weight percent of each ingredient, exempt compound content, metal content, specular gloss, or acid content may also be used after approval in writing by the Executive Officer:

- (a) Testing for Products Subject to the VOC Limits Specified in Section 94522(a)(2).
 - (1) VOC Content. The VOC content of all aerosol coating products subject to the provisions of this article shall be determined by the procedures set forth in "Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products," adopted September 25, 1997 and as last amended on July 18, 2001 [Date of Amendment].
 - (2) In sections 3.5 and 3.7 of Air Resources Board (ARB) Method 310, a process is specified for the "Initial Determination of VOC Content" and the "Final Determination of VOC Content". This process is an integral part of testing procedure set forth in ARB Method 310, and is reproduced below:

Sections 3.5 and 3.7 of Air Resources Board Method 310

- 3.5 Initial Determination of VOC Content. The Executive Officer will determine the VOC content pursuant to section 3.2 and 3.3. Only those components with concentrations equal to or greater than 0.1 percent by weight will be reported.
 - 3.5.1 Using the appropriate formula specified in section 4.0, the Executive Officer will make an initial determination of

whether the product meets the applicable VOC standards specified in ARB regulations. If initial results show that the products does not meet the applicable VOC standards, the Executive Officer may perform additional testing to confirm the initial results.

- 3.5.2 If the results obtained under section 3.5.1 show that the products does not meet the applicable VOC standards, the Executive Officer will request the product manufacturer or responsible party to supply product formulation data. The manufacturer or responsible party shall supply the requested information. Information submitted to the ARB Executive Officer may be claimed as confidential; such information will be handled in accordance with the confidentiality procedures specified in Title 17, California Code of Regulations, sections 91000 to 91022.
 - 3.5.3 If the information supplied by the manufacturer or responsible party shows that the product does not meet the applicable VOC standards, then the Executive Officer will take appropriate enforcement action.
 - 3.5.4 If the manufacturer or responsible party fails to provide formulation data as specified in section 3.5.2, the initial determination of VOC content under this section 3.5 shall determine if the product is in compliance with the applicable VOC standards. This determination may be used to establish a violation of ARB regulations.
 - 3.7 Final Determination of VOC Content. If a product's compliance status is not satisfactorily resolved under section 3.5 and 3.6, the Executive Officer will conduct further analyses and testing as necessary to verify the formulation data.
 - 3.7 .1 If the accuracy of the supplied formulation data is verified and the product sample is determined to meet the applicable VOC standards, then no enforcement action for violation of the VOC standards will be taken.
 - 3.7.2 If the Executive Officer is unable to verify the accuracy of the supplied formulation data, then the Executive Officer will request the product manufacturer or responsible party to supply information to explain the discrepancy.
 - 3.7.3 If there exists a discrepancy that cannot be resolved between the results of Method 310 and the supplied formulation data, then the results of Method 310 shall take precedence over the supplied formulation data. The results

of Method 310 shall then determine if the product is in compliance with the applicable VOC standards, and may be used to establish a violation of ARB regulations.

- (b) Testing for Products Subject to the Reactivity Limits Specified in Section 94522(a)(3).
 - (1) The ingredients and the amount of each ingredient of all aerosol coating products subject to the provisions of this article shall be determined by the procedures set forth in "Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products," adopted September 25, 1997 and as last amended on July 18, 2001 [Date of Amendment].
 - (2) Upon written notification from the Executive Officer, the aerosol coating manufacturer shall have 10 working days to provide to the Executive Officer the following information for products selected for testing:
 - (A) the product category as defined in section 94521(a);
 - (B) the PWMIR;
 - (C) the weight fraction of all ingredients including: water, solids, each ROC, and any compounds assigned a MIR value of zero as specified in sections 94522(h), 94700, or 94701 [Each ROC must be reported as an ingredient if it is present in an amount greater than or equal to 0.1 percent by weight of the final aerosol coatings formulation. If an individual ROC is present in an amount less than 0.1 percent by weight, then it does not need to be reported as an ingredient. In addition, an impurity that meets the following definition does not need to be reported as an ingredient.

For the purpose of this section, an "impurity" means an individual chemical compound present in a raw material which is incorporated into the final aerosol coatings formulation, if the compound is present below the following amounts in the raw material:

- (i) for individual compounds that are carcinogens, as defined in 29 CFR section 1910.1200(d)(4), each compound must be present in an amount less than 0.1 percent by weight in order to be considered an "impurity."
- (ii) for all other compounds present in a raw material, a compound must be present in an amount less than

1 percent by weight in order to be considered an "impurity"];

- (D) any other information necessary to determine the PWMIR of the aerosol coating products to be tested.
- (3) Final determination of the PWMIR of the aerosol coatings shall be determined using the information obtained from section 94526(b)(1) and (2).
- (c) Exempt Compounds from Products Subject to the VOC Limits Specified in Section 94522(a)(2). Compounds exempt from the definition of VOC shall be analyzed according to the test methods listed below:
 - (1) the exempt compound content of aerosol coating products shall be determined by "Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products," adopted September 25, 1997 and as last amended on July 18, 2001 [Amendment Date], which is incorporated herein by reference.
 - (2) the following classes of compounds will be analyzed as exempt compounds only if manufacturers specify which individual compounds are used in the product formulations and identify the test methods, which prior to such analysis, have been approved by the Executive Officer of the ARB, and can be used to quantify the amounts of each exempt compound: cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- (d) Metal Content. The metal content of metallic aerosol coating products shall be determined by South Coast Air Quality Management District (SCAQMD) Test Method 318-95 "Determination of Weight Percent Elemental Metal in Coatings by X-ray Diffraction" July 1996, which is incorporated herein by reference.
- (e) Specular Gloss. Specular gloss of flat and nonflat coatings shall be determined by ASTM Method D-523-89, March 31, 1989, which is incorporated herein by reference.
- (f) Acid Content. The acid content of rust converters shall be determined by ASTM Method D-1613-91 96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish. Lacquer, and Related Products, May 15, 1991 May 10, 1996, which is incorporated herein by reference.

(g) Lacquers. Lacquer aerosol coating products shall be identified according to the procedures specified in ASTM Method D-5043-90, "Standard Test Methods for Field Identification of Coatings," April 27, 1990, which is incorporated herein by reference.

NOTE: Authority cited: Sections 39600, 39601, 39607, 41511, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 39607, 40000, 41511, and 41712, Health and Safety Code.

[No changes are proposed to sections 94527 or 94528.]

California Environmental Protection Agency

Air Resources Board

METHOD 310

DETERMINATION OF VOLATILE ORGANIC COMPOUNDS (VOC) IN CONSUMER PRODUCTS AND REACTIVE ORGANIC COMPOUNDS IN AEROSOL COATING PRODUCTS

(Including Appendices A and B)

Adopted: September 25, 1997 Amended: September 3, 1999

Amended: July 18, 2001 Amended: May 5, 2005

DISCLAIMER: Mention of any trade name or commercial product in Method 310 does not constitute endorsement or recommendation of this product by the Air Resources Board.

METHOD 310

DETERMINATION OF VOLATILE ORGANIC COMPOUNDS (VOC) IN CONSUMER PRODUCTS AND REACTIVE ORGANIC COMPOUNDS IN AEROSOL COATING PRODUCTS

1 APPLICABILITY

- 1.1 This method (Method 310) applies to the determination of the percent by weight of
 - (1) volatile organic compounds (VOC) in consumer products, antiperspirant and deodorant products, and aerosol coatings products as those terms are defined in Title 17. California Code of Regulations (CCR), Division 3, Chapter 1, Subchapter 3,500 insumer Products), commencing with section 94506, and
 - (2) The vapor pressures value organic compounds 10^{8} PeV to a section open a defined of section (45) Scale and
 - (3) the reactive organic compounds (ROC) contained in heriscil chatting physicial than term is defined in Title 17, CCR, section (452)
- Method 310 determines the total volatile material in a product and the presence of any compounds prohibited by ARB regulations ("prohibited compounds"). Components of the product that do not meet the definition of a VOC or are exempted by ARB regulations for a specific product category ("exempt compounds") are subtracted from the total volatile material to determine the final VOC content for the product. Method 31% is also used to determine the percent by weight of the ROCs contained in aerosol coating products, for the purpose of determining compliance with the Regulation for Reducing the Ozone Formed from Aerosol Coating Product Emissions. Title 17, CCR, sections 94520 to 94528 (the "Aerosol Coatings Regulation").
- 1.3 Method 310 does not apply to the determination of the composition or concentration of fragrance components in products.
- 1.4 The term "Executive Officer" as used in this document means the Executive Officer of the Air Resources Board or his or her authorized representative.

2 TEST METHODS

Method 310 incorporates by reference the following American Society for Testing and Materials (ASTM), National Institute for Occupational Safety and Health (NIOSH), and United States Environmental Protection Agency (US EPA) analytical test methods:

2.1 ASTM D 2369-97 01: Standard Test Method for Volatile Content of Coatings (July 10. 1997 January 10. 2001).

- 2.2 ASTM D 1426-93 98: Standard Test Methods for Ammonia Nitrogen in Water (September 15, 1993-December 10, 1998).
- 2.3 ASTM D 4017-96a: Standard Test Method for Water in Paints and Paint Materials by the Karl Fisher Titration Method (July 10, 1996).
- 2.4 ASTM D 3792-91 99: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection Into a Gas Chromatograph (May 15, 1994 May 10, 1999).
- 2.5 ASTM D 859-94 00: Standard Test Method for Silica in Water (determination of polymethylsiloxanes after digestion) (May 15, 1994 June 10, 2000).
- ASTM D 3074-94: Standard Test Methods for Pressure in Metal Aerosol Containers (November 15, 1994) with the modifications found in Appendix A to this Method 3.
- 2.7 ASTM D 3063-94. Standard Test Methods for Pressure in Glass Agrisci E tiles (November 15, 1994) with the modifications found in Appen inc Visiting Medical 3.
- 2.3 ASTM D 3064-80-97 Standard Terminology Relating to Aerosol Products (November 24,4080 September 10, 1997)
- 2.9 NIOSH: Method 1400 Alcohols I (analysis of acetone and ethanol by gas chromatography). NIOSH Manual of Analytical Methods, Volume 1 (February 1984). August 1994).
- 2.1) Gas Chromatography, Mass Spectrometry for Volatile Organics (analysis of exempt and prohibited compounds in the product by headspace.gas chromatography mass spectrometry).
- 2.10.1 US EPA Method 8240B, September 1994, Revision 2, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Test Methods for Evaluating Solid Waste, Volume 1 B, Chapter 4, Section 4.3.2: Laboratory Manual Physical/Chemical Methods, SW-846, September 1994.
- 2.10.2 US EPA Method 8260B, December 1996, Revision 2, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Test Methods for Evaluating Solid Waste, Volume 1 B, Chapter 4, Section 4.3.2: Laboratory Manual Physical/Chemical Methods, SW-846, December 1996.
- 2.11 US EPA Reference Method 24. Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings: 40 Code of Federal Regulations (CFR) Part 60, Appendix A, as it existed on July 1, 1994 September 11, 1995.
 - 2.12 US EPA Reference Method 24A, Determination of Volatile Matter Content and Density of Printing Inks and Related Coatings: 40 CFR Part 60, Appendix A, as it existed on July 1, 1994.

- 2.13 US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography: 40 CFR Part 60, Appendix A, as it existed on July 1, 1994 September 25, 1996.
- 2.14 US EPA Method 300.7, March 1986. Dissolved Sodium, Ammonium, Potassium, and Calcium in Wet Deposition by Chemically Suppressed Ion Chromatography.
- 2 15 ASTM D 86-96 01: Standard Test Methods for Distillation of Petroleum Products (April 10, 1996 August 10, 2001).
- 2.16 ASTM D 850-93 <u>00</u>: Standard Test Methods for Distillation of Industrial Aromatic Hydrocarbons and Related Materials (<u>April 15, 1993 December 10, 2000</u>).
- 2 17 ASTM D 1078-97 01: Standard Test Methods for Distillation Range of Volatile Enquids (July 10, 1997 June 10, 2001).
- 2.18 ASTM D 2879-97. Standard Test Method the Vapor-Pressure-Pemperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. Agril 10.13975 with the modifications found in Appendix B to this Method 319.
- 2,19 ASTM D 2887-97 01: Standard Test Method for Boiling Range Distribution of Petroleum Fractions by Gas Chromatography (April 10, 1997 May 10, 2001):
- 2.20 ASTM E 1719-97. Standard Test Method for Vapor Pressure of Liquids by Ebulliometry (March 10, 1997).

3 CONSUMER PRODUCTS TESTING PROCEDURE

- 3.1 The testing begins when the Executive Officer selects a product for analysis by Method 310. The Executive Officer will maintain sample chain of custody throughout the selection and analytical process.
- 3.2 Initial Testing of Aerosol Products
 - If the sample is an aerosol product, the aerosol propellant is separated from the liquid non-propellant portion of the product by using ASTM D 3074-94 (as modified in Appendix A for metal aerosol container) or ASTM D 3063-94 (as modified in Appendix A for glass aerosol container). The propellant portion is analyzed for exempt or prohibited compounds by using US EPA Reference Method 18. The remaining liquid non-propellant portion of the product is then analyzed as specified in section 3.3.
- 3.3 Initial Testing of Non-Aerosol Products and the <u>Liquid Non-Propellant</u> Portion of Aerosol Products
 - The liquid, solid, or gel non-aerosol product or non-propellant portion of an aerosol product sample is analyzed to determine the total volatile material present in the sample

and to determine the presence of any exempt or prohibited compounds. This analysis is conducted by performing the following tests:

- Gravimetric analysis of samples to determine the weight percent of total volatile material, using US EPA Reference Methods 24/24A, ASTM D 2369-97 01.
- 3.3.2 Determination of sample water content. For determination of water content either ASTM D 4017-96a, or ASTM D 3792-94 99 may be used, or results from both procedures may be averaged and that value reported.
- Determination of ammonium content using ASTM D 1426-93 98 or US EPA Method 300.7.
- 3.3.4 Determination of ketones and alcohol content using NIOSH Method (4.4)
- Analysis of exempt and prehibited compounds, if present (US EPA Reference Method 18, US EPA Method 824 B. US EPA Method 826 B. ASTNI D *50-04 60 NIOSH Method 1400)
- 3.3 o If LVP-VOC status is claimed or the analysis indicates the presence of an LVP-VOC component and the percent VOC is not in compliance, the Executive Officer will request formulation data as specified in Section 3.5.2.
- 3.4 Prohibited Compounds

If the sample is found to contain compounds prohibited by ARB regulations (i.e., ezone-depleting compounds) at concentrations equal to or exceeding 0.1 percent by weight, the Executive Officer will reanalyze the sample for confirmation.

3.5 Initial Determination of VOC Content

The Executive Officer will determine the VOC content pursuant to sections 3.2 and 3.3. Only those components with concentrations equal to or greater than 0.1 percent by weight will be reported.

- Using the appropriate formula specified in section 4.0, the Executive Officer will make an initial determination of whether the product meets the applicable VOC standards specified in ARB regulations. If initial results show that the product does not meet the applicable VOC standards, the Executive Officer may perform additional testing to confirm the initial results.
- 3.5.2 If the results obtained under section 3.5.1 show that the product does not meet the applicable VOC standards, the Executive Officer will request the product manufacturer or responsible party to supply product formulation data. The

Alternate test methods may be used, as provided in section 7.0

manufacturer or responsible party shall supply the requested information. Information submitted to the ARB Executive Officer may be claimed as confidential; such information will be handled in accordance with the confidentiality procedures specified in Title 17, California Code of Regulations, sections 91000 to 91022.

- 3.5.3 If the information supplied by the manufacturer or responsible party shows that the product does not meet the applicable VOC standards, then the Executive Officer will take appropriate enforcement action.
- 3.5.4 If the manufacturer or responsible party fails to provide formulation data as specified in section 3.5.2, the initial determination of VOC content under this section 3.5 shall determine if the product is in compliance with the applicable VOC standards. This determination may be used to establish a violation of ARB regulations.
- 3.6 Determination of the LVP-VOC status of compounds and mixtures. This seem in died not apply to antiperspirants and deodorants or densel equatings products because there is no LVP-VOC exemption for these products.
- Formulation data. If the vapor pressure is unknown, the following ASVVI methods may be used to determine the LVP-VCC status of compounds and mixtures: ASTVI D 86-96 01 (April 10, 1995). ASTM D 850-93 00 (April 15, 1995). ASTM D 1. 78-97 01 (April 10, 1997), as modified in Appendix B to this Method 310. ASTM D 2887-97 01 (April 10, 1997) and ASTM E 1719-77 (March 10, 1997).
- 3.6.2 LVP-VOC status of "compounds" or "mixtures." The Executive Officer will test a sample of the LVP-VOC used in the product formulation to determine the boiling point for a compound or for a mixture. If the boiling point exceeds 216°C, the compound or mixture is an LVP-VOC. If the boiling point is less than 216°C, then the weight percent of the mixture which boils above 216°C is an LVP-VOC. The Executive Officer will use the nearest 5 percent distillation cut that is greater than 216°C as determined under 3.6.1 to determine the percentage of the mixture qualifying as an LVP-VOC.
- Reference method for identification of LVP-VOC compounds and mixtures. If a product does not qualify as an LVP-VOC under 3.6.2, the Executive Officer will test a sample of the compound or mixture used in a products formulation utilizing one or both of the following: ASTM D 2879-97, as modified in Appendix B to this Method 310, and ASTM E 1719-97, to determine if the compound or mixture meets the requirements of definition of LVP-VOC as specified in Title 17, CCR, section 94508(a)(-78)(A).

3.7 Final Determination of VOC Content

If a product's compliance status is not satisfactorily resolved under sections 3.5 and 3.6, the Executive Officer will conduct further analyses and testing as necessary to verify the formulation data.

- 3.7.1 If the accuracy of the supplied formulation data is verified and the product sample is determined to meet the applicable VOC standards, then no enforcement action for violation of the VOC standards will be taken.
- If the Executive Officer is unable to verify the accuracy of the supplied formulation data, then the Executive Officer will request the product manufacturer or responsible party to supply information to explain the discrepancy.
- 3.7.3 If there exists a discrepancy that cannot be resolved between the results of Method 3.00 and the supplied formulation data, then the results of Method 3.10 shall take precedence over the supplied formulation data. The results of Method 3.10 shall first determine if the product is in a impliance with the applicable V&C standards and may be used to establish a violation of ARS regulations.

4 CALCULATION OF VOC CONTENT

This section specifies the procedure for enleularing and determining the final VOC content of a product, which is reported as a single percent by weight of VOC

4.1 Aerosol Products

For aerosol products, <u>except those containing LVP-VOC</u>, the percent VOC content shall be calculated using the following equation:

$$\% VOC = \frac{WL(TV - A - H - EL) + WP - EP}{WL + WP} \times 100$$

Where2:

WL = weight (gm) of liquid product the non-propellant portion, excluding container and packaging.

TV = weight fraction of non-propellant total volatile material. (US EPA Reference Methods 24/24A, ASTM D 2369.97)

²Alternate test methods, as provided in *section 7.0 6.0*, or appropriate approved methods from section 2.0 may be used.

- A = weight fraction of ammonia (as NH₄) in liquid the non-propellant portion. (ASTM D 1426-93) or US EPA Method 300.7
- H = weight fraction of water in liquid the non-propellant portion. (ASTM D 3792-91 or ASTM D 4017-96a.)
- EL = weight fraction of exempt compounds in liquid the non-propellant portion (US EPA Method 8240B, US EPA Method 8260B, US EPA Reference Method 18, ASTM D 859-94, NIOSH Method 1400), ASTM D 86-96, ASTM D 850-93, ASTM D 1078-97, ASTM D 2879-97, as modified in Appendix B to this Method 310, ASTM D 2887-97, ASTM E 1719-97. LVP VOCs are exempted in accordance with section 94508(4478)
- WP = weight (gm) of propellant, (ASTM D 307) of fas modified and include ASTM D 3061 39 or ASTM D 3063 M fas modified and include ASTM D 3061 39 or excluding comminger and problems.
- EP = Weight (gm) of exempt compliands in propelling -LS EPA Reference

 Method 48)
- 4.1.2 For aerosol products containing LVP-VOC, the percent VOC shall be calculated using the following equation:

% VCC =
$$\frac{WL[(1-H)\times(1-LVP)-EL]+(WP-EP)}{WL+WP} \times 100$$

Where:

- <u>LVP</u> = weight fraction of LVP-VOC compounds and or mixtures in the nonpropellant, non-aqueous portion.
- I-H = weight of the non-propellant portion that does not contain water.
- 1-LVP= weight of the non-propellant, non-aqueous portion that is volatile.

4.2 Non-Aerosol Products

4.2.1 For non-aerosol products, except those containing LVP-VOC, the percent VOC content shall be calculated using the following equation:

$$% VOC = (TV - A - H - EL) \times 100$$

$$% VOC = [(1-H) \times (1-LVP) - EL] \times 100$$

5 TESTING TO DETERMINE REACTIVE ORGANIC COMPOUNDS IN AEROSOL COATING PRODUCTS

This section specifies the procedure for determining the percent by weight of the reactive organic compounds contained in aerosol coating products, for the purpose of determining compliance with the Aerosol Coatings Regulation.

- 5.1 The testing begins when the Executive Officer selects a product if r analysis. The Executive Officer will maintain sample chain of castady throughout the selects in and analytical process. When a product is selected for testing, the Executive Unitial not request the product manufacturer or responsible party to supply the product manufacturer or responsible party of supply the product manufacturer or responsible party shall supply the requested information within 19 working days. Information submitted to the Executive Officer may be claimed as confidential, such information with be handled in accordance with the confidentiality procedures specified in sections 24.00 to 91.022. Title 17, CCR.
- 5.2 Initial Testing of the Propellant Portion of Aerosol Coating Products

The aerosol propellant is separated from the non-propellant portion of the product by using ASTM D 3074-94 (as modified in Appendix A for metal aerosol container) or ASTM D 3063-94 (as modified in Appendix A for glass aerosol container). The propellant portion is analyzed for reactive organic compounds and other compounds by using US EPA Reference Method 18. The remaining non-propellant portion of the product is then analyzed as specified in section 5.3.

5.3 Initial Testing of the Non-Propellant Portion of Aerosol Coating Products

The non-propellant portion of the product sample is analyzed to determine the reactive organic compounds in the sample, including the presence of any prohibited compounds. This analysis is conducted by performing the following tests:³

- 5.3.1 Gravimetric analysis of samples to determine the weight percent of total volatile material, using US EPA Reference Methods 24/24A, ASTM D 2369-92-01
- Determination of sample water content. For determination of water content either ASTM D 4017-96a, or ASTM D 3792-94 99 may be used, or results from both procedures may be averaged and that value reported.

Alternate test methods may be used, as provided in section 7.0

- 5.3.3 Determination of ammonium content using ASTM D 1426–93 <u>98</u> or US EPA Method 300.7.
- 5.3.4 Determination of ketones and alcohol content using NIOSH Method 1400.
- 5.3.5 Analysis of reactive organic compounds and, if present, prohibited compounds (US EPA Reference Method 18, US EPA Method 8240B, US EPA Method 8260B, ASTM D 859-94 <u>00</u>, NIOSH Method 1400)
- 5.4 Prohibited Compounds

If the sample is found to contain compounds prohibited by the Aerosol Coatings Regulation (e.g., ozone-depleting compounds) at concentrations equal to or exceeding a 1 percent by weight, the Executive Officer will reanalyze the sample for confirmation.

5.5 Initial Determination and Ventication of Reactive Organic Compound Content

The Evecutive Officer will determine the reactive organic composition on only anti-orginal formulation data pursuant to sections 5.2 and 5.3. Only those components with concentrations equal to or greater than 9.1 percent by weight will be reported.

- Based on manufacturers formulation data and the analysis conducted under section 5, the Executive Officer will make an initial determination of whether the product meets the applicable requirements specified in the Aerosol Coatings Regulation. If initial results show that the product does not meet the applicable requirements, the Executive Officer may perform additional testing to confirm the initial results.
- 5.6 Final Determination of Reactive Organic Compound Content

If a product's status is not satisfactorily resolved under section 5.1 - 5.5, the Executive Officer may conduct additional analyses and testing as necessary to verify the formulation data.

- 5.6.1 If the Executive Officer is unable to verify the accuracy of the supplied formulation data, then the Executive Officer will request the product manufacturer or responsible party to supply additional information to explain the discrepancy.
- 5.6.2 If the additional information supplied by the manufacturer or responsible party shows that the product does not meet the applicable requirements, then the Executive Officer will take appropriate enforcement action.
- 5.6.3 If the manufacturer or responsible party fails to provide additional information as specified in section 5.6.1, the initial determination of reactive organic compound content under section 5.1 5.5 shall determine if the product is in compliance with the applicable reactive organic compound limits. This determination may be used to establish a violation of the Aerosol Coatings Regulation.

If there exists a discrepancy that cannot be resolved between the results of Method 310 and the formulation data or additional information supplied by the manufacturer or responsible party, then the results of Method 310 shall take precedence over the supplied formulation data or additional information. The results of Method 310 shall then determine if the product is in compliance with the applicable requirements, and may be used to establish a violation of the Aerosol Coatings Regulation.

6 METHOD PRECISION AND ACCURACY

- The precision of Method 310 for determining VOC content was evaluated using seven representative products with known volatile organic compound (VOC) contents ranging from 6.2 to 81.2 percent VOC by weight. Each sample was divided into six portions, and each portion was separately analyzed to determine the VOC content. Based on the results of this analysis, the 95 percent confidence interval for Method 310 is 3.1 percent by weight (Wt Wt%).
- For determining the percent by weight of the individual ingredients in aerosolic many products, the precision and accuracy of the determination for each ingredient is governod by the precision and accuracy of the test method used to ascertain the percent by weight of each ingredient.

7 ALTERNATE TEST METHODS

Alternative test methods which are shown to accurately determine the concentration of VOCs or constituent components in antiperspirant/deodorants, consumer products, or aerosol coating products (or their emissions) may be used upon written approval of the Executive Officer

Method 310 - Appendix A

PROPELLANT COLLECTION PROCEDURES

1 APPLICATION

The procedure applies to modify ASTM D 3074-94 and D 3063-94 to allow collection of the propellant for analysis and density measurement for metal aerosol containers and glass aerosol containers, respectively. These modified procedures also retain the aerosol standard terminology listed in ASTM D 3064-89.9° The aerosol product container is pierced and the propellant is bled into an evacuated manifold. After the manifold reaches atmospheric pressure, approximately 1 liter of the propellant is collected in a clean evacuated Tedlar bag. For density measurement the propellant is collected into an evacuated 250 mL glass dilution bulb that has been weighed to the nearest of magnetic filling, the dilution bulb is re-weighed to determine the density of the propellant. Alternately, density may be determined using a Density specific Gravity Meter. The Tedlar bag with the propellant aliquot is taken to the historia to fire undersity.

2 LIMITATIONS

Nitrogen analysis: Nitrogen may be used as a component of the proper and vision. Arms on air is 78 percent nitrogen and may be present as a contaminate in the system process of collection. This is eliminated by completely evacuating the propellant collection system and sweeping out any connecting lines to the Tedlar bag with product before starting sample collection. This procedure will eliminate or reduce nitrogen contamination to less than 0.1% by weight of the sample and the analysis of the propellant gas will be unaffected.

3 APPARATUS AND MATERIALS

- Propellant Collection System * See Figure 1 (metal containers) and Figure 3 (glass containers). The system was built from 1/4" stainless steel and Tellon tubing. The vacuum pump is of bellows diaphragm design.
- 3.2 Tedlar Bags, 1-liter, equipped with slip valve and septum
- 3.3 Density Measurement
- 3.3.1 250 mL gas dilution bulb, or

The metal piercing adapter is available from Mid-West Screw Products. Inc., 3523 North Kentan Ave., Chicago, IL 606-11. Interim Part Number, 8013A-3-1 Langer SS. The gasket is available from Alltech Associate 2051 Waakegan road, Deerficia, IL 60013, part number 80-io. The glass acrossl adapter is available from Modern Machine Ship, Inc., P.O. Box 824-123 N. Hazel Street, Danville, IL 61832.

- 3.3.2 Density/Specific gravity meter meeting the following minimum specifications:
- 3.3.2(a) Measurement Method: Natural Oscillation Type
- 3.3.2(b) <u>1</u> <u>Measurement</u> Range: $0 3 + \frac{1}{2} = 0.00001$ g/cm³
- 3.3.2(e) .2 Measurement Temperature Range: $4^{\circ}\text{C} \sim 70^{\circ}\text{C}$.
- 3.3.2(d) Temperature Accuracy: +/ 0.02°C (10°C 30°C) and +/ 0.05°C (4°C 70°C).
- 3.3.2(e) Temperature Control Accuracy: +/ 0.01°C.
- 3.3.2(f) Measurement Time: 1-4 minutes
- 3.4 Gas tight springe, 100 at
- 3.5 ₹ Balance, capable of accurately weighing to 0.1 mg
- 3.6.5 Can Piereing Sample Venting Platform. See Figure 2 (metal eans containers) and Figure 3.4 (glass containers).
- 3.76 Platform Shaker, equivalent to Thermolyne M49125
- 3.7 Cork Rings, 80 x 32 mm

4 PROCEDURE

- 4.1 Propellant Collection for Metal Aerosol Containers
- 4.1.1 Turn on vacuum pump, eClose valves and evacuate the system on Propellant Collection System (see Figure 1).
- 4.1.2 Remove the valve actuator <u>from valve</u> on the aerosol can and weigh can to the nearest 0.01 g. Invert the can into cork holding ring on the piercing apparatus, center and snug against the gasket. (Figure 2)

¹ The metal piercing adaptor is available from Mid-West Screw Products, Inc., 3523 North Kenton Ave., Chicago, IL 60641. Interim Part Number: 8013A-3:4 15TAPER REV. The gasket is available from Alltech Associate 2051 Waukegan road. Deerfield, IL 60015, part number 80-16.

 $^{^2}$ The glass aerosol tapered adaptor is available from Armstrong Technologies, Inc. 12*80 Earhart Ave., Auburn, CA 95602.

- 4.1.3 Connect Tedlar bag to output 2, evacuate bag and seal. Connect 250 mL glass dilution bulb to output 1, evacuate bulb and seal. Place the can in an inverted position onto the Sample Venting Platform, stabilized by cork rings.
- 4.1.4 Slowly raise the hydraulic jack until the can is pierced. Record <u>Note</u> the pressure of the can.
- 4.1.5 Vent the can until the pressure is at about 25 psi propellant is seen flowing from output 1. Collect the propellant in the Tedlar bag, from output 1. Density is determined from this same Tedlar bag, as necessary.
- 4.16 After the propellant is collected, close and remove the Tedlar bag and vent the remainder of the propellant.
- 4.1.7 Weigh the evacuated 250 mL bulb to the nearest 6.1 mg. The global while handling the bulb. Connect the bulb to the Tedline bug and space of these buse Cines the values and reweigh the dilution bulb, record the weight gain and ealculate the propellant density in gm.1.
- 4.1.8 4.1.7 After the flow ceases from the can, it is removed from the assembly and allowed to vent overnight. The ear may be placed on a platform shaker, to vent the remainder of the propellant.
- 4.1.9 4.1.8 Reweigh the can to the nearest 0.01 gm and record weight loss (total gms propellant).

 The can may now be opened for analysis of the liquid product non-propellant portion of the sample.
- 4.2 Propellant Collection for Glass Aerosol Containers
- 4.2.1 Turn on vacuum pump, close valves and evacuate the system (see Figure 1).
- 4.2.2 Connect Tedlar bag to output 2, evacuate bag and seal. Connect 250 mL glass dilution bulb to output 1, evacuate bulb and seal.
- 4.2.3 The gauge assembly is prepressurized in order to minimize product expulsion and system contamination.
- 4.2.1 A.2.1 Remove the actuator from valve of the aerosol glass container, and weigh container to the nearest 0.01 gm.
- 4.2.5 4.2.2 With container in an inverted position place the valve onto the tapered adapter.

 Bring the top plate down to the flat of the container and tighten the nuts. A cork ring may be required to stabilize the container

- 4.2.3 Pressurize the air cylinder to actuate the sample container valve onto the tapered adaptor. Note the pressure of the sample container.
- 4.2.6 1.2.1 Record pressure of container and vent until the pressure is approximately one half of recorded pressure Open the sample valve and cCollect propellant sample into the Tedlar bag. Density is determined from this same Tedlar bag, as necessary.
- 4.2.7 <u>4.2.5</u> After the propellant is collected, close and remove the Tedlar bag and vent the remainder of the propellant.
- 4.2.8 Weigh the evacuated 250 mL bulb to the nearest 0.1 mg. I so gloves while handling the bulb. Connect the bulb to the Tedlar bag and open to fill the bulb. Close the valves and re-weigh the dilution bulb, record the weight gain and ealeulate the propellant density in gm.1.
- 4.2.2 4.2.6 Continue to vent the container on the pratform assembly overnight until no pressure registers on the sample gauge and there in no visable propellant floreing from the sampling tube.
- 4.2.19.4.2. TRemove the container from the platform and loosen valve assembly, do not remove valve assembly at this time
- 4.2.8 Loosen and remove the container valve assembly.
- 4.2.114.2.9 Place the container on a platform shaker to vent the remainder of the propellant.
- 1.2.12.1.2.10 Reweigh the container and valve assembly to the nearest 0.01 gm and record weight loss (total gms propellant). The container may now be opened for analysis of the liquid product non-propellant portion of the sample is ready to be analyzed.

FIGURE 1

PROPELLANT COLLECTION SYSTEM METAL AEROSOL CONTAINER

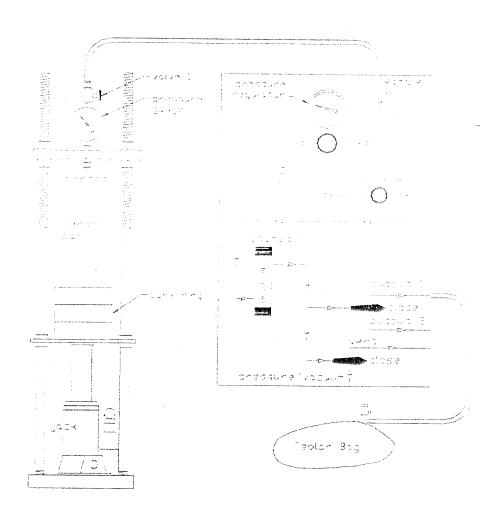


FIGURE 2

SAMPLE VENTING PLATFORM METAL AEROSOL CONTAINER

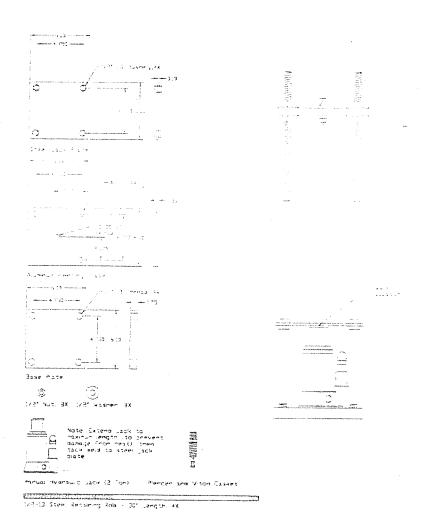


FIGURE 3

PROPELLANT COLLECTION SYSTEM GLASS AEROSOL CONTAINER

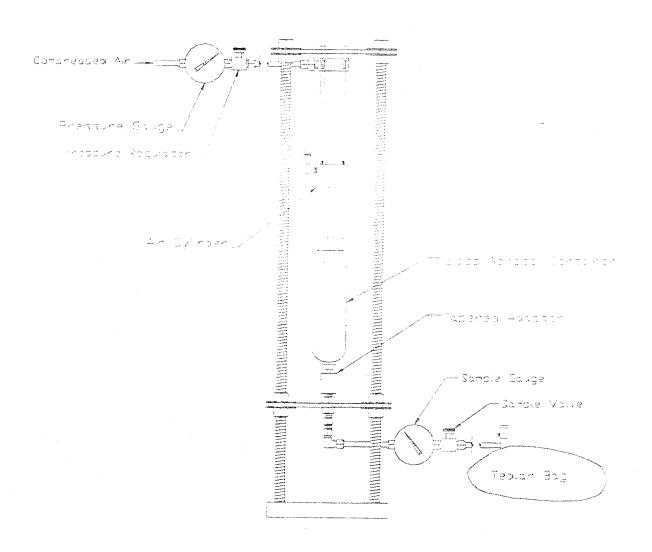


FIGURE 4

SAMPLE VENTING PLATFORM GLASS AEROSOL CONTAINER

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Method 310 - Appendix B

MODIFICATIONS to ASTM D-2879-97 (April 10, 1997)

This procedure modifies ASTM D-2879-97 (April 10, 1997) as follows:

- 1. Modifications to the isoteniscope apparatus include:
 - a. capacitance manometers and digital readout
 - b. manifold system made of stainless steel and modified in design
 - c. Ultra-torr fittings and Ultra-torr flex-lines
 - d. ballast on the vacuum side of the isoteniscope manifold as depicted in ASTM D 2879-97 schematics, has been removed.
 - e. stainless steel liquid nitrogen trap (Cold Tran)
 - f. stainless steel high vacuum valves
 - g. recirculating pooling system (required for extremely loss) pressure work any
 - h. diffusion pump (required for extremely low pressure work only).
 - to hot ion cathode vacuum gauges (required for extremely low pressure work enits)
- 2. A purge and degassing procedure consisting of lower pressures and a liquid narragen bath replaces the step of lightly boiling the sample as outlined in ASTM D 2870-07.
- 3. Purge and Degassing Cycle
 - a. With the U-tube connected, the system is evacuated to approximately 1.0 mm Hg. This readily removes most of the higher volatility gases from the sample.
 - b. The stainless steel, liquid nitrogen cold trap is filled. The manifold is now brought to approximately 300 mm Hg with the purified nitrogen, regulated through the needle valve.
 - c. The isoteniscope tube is carefully placed into a Dewar of liquid nitrogen. The ½ atmosphere pressure of nitrogen prevents the sample from splashing while being frozen. After the sample freezes, the system is evacuated to 0.05 mm Hg.
 - d. The U-tube is removed from the Dewar, secured and allowed to warm to room temperature. The U-tube bulb head should be angled so the dissolved gases will be readily evacuated as the frozen sample starts to melt. When gases build up, it may be necessary to tilt the U-tube to release the gases.
 - e. Repeat the freeze and degas process once, reducing pressure each time to less than 0.05 mm Hg. After the sample has returned to room temperature, close valve =3. There should be minimal dissolved gases left once the frozen sample starts to melt. Tilt the tube to release any gas pockets (if necessary). Do not push nitrogen into the evacuated

Appendix B: Method 310 Page 1

space between the sample in the arm and the sample in the reservoir. At this point, if the sample is properly degassed, a "natural break" should form in the sample. This creates a vapor space as the liquid level in the bulb leg of the manometer falls to a quasi-equilibrium position, usually with the fluid level higher in the long manometer leg. If there is no pendulum effect, and the liquid level in the long leg of the manometer is significantly higher than the level in the short leg (≥ 2 mm), degassing is probably incomplete, and the degassing procedure should be repeated.

4. Data Evaluation

The regression based on the plot of Log P vs. LT as outlined in ASTM D 2879-97 has been removed and replaced with a nonlinear regression to generate the coefficients for an Antoine equation. The data analysis procedure assumes that the measured pressure is the sum of the compound's vapor pressure and a residual fixed gas pressure. The vapor pressure's dependence on absolute temperature is represented by an Antoine expression, and the fixed gas as pressure is directly proportional to absolute temperature as outlined in ASTM 2879. This leads to the model equations

$$P_{\text{mad } p} = P_{\text{mad } p} + P_{\text{fixed } \text{ las}}$$

$$P_{model} = B0 * 10^{-314.7 + 32} + B3 * T$$

where T is the absolute temperature (K) and B0, B1, B2 and B3 are coefficients to be determined via a nonlinear regression which minimizes the sum of squares $\sum \left(P_{\text{meas}} - P_{\text{model}}\right)^2 \text{ for all experimental data points. The vapor pressure at 20° C is then calculated as:}$

$$P_{vapor}$$
 (293.15 K) = B0 * 10 (81/(293.15+32))

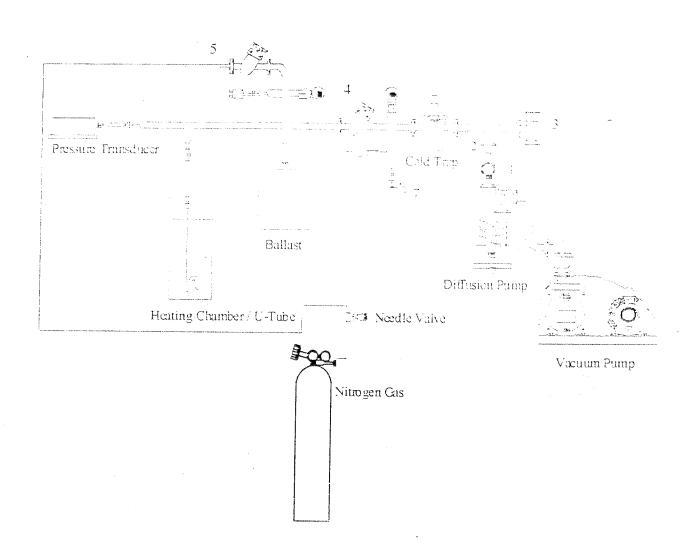
With a set of pressure vs. temperature measurements, the nonlinear regression can be performed using a statistical software packages. The following constraints are imposed to obtain meaningful Antoine equation coefficients for low vapor pressure samples:

a. Pressures shall be measured at temperatures ranging from room temperature to about 180° C. Narrower ranges will not provide sufficient information to determine the Appendix B: Method 310 Page 2.

Antoine curvature, i.e., B2 coefficient. Wider ranges can lead to experimental difficulties maintaining the vapor space in the isoteniscope. A minimum of 12 points is necessary to provide ample degrees of freedom for the calculations.

- b. Initial pressures at room temperature shall be less than 1 mm Hg. Higher values are indicative of significant levels of dissolved fixed gases. These will vaporize during the course of the experiment as temperature is increased and invalidate the model's assumption for the fixed gas contribution.
- c. -235 ≤ B 2 ≤ 0. Positive values of B2 imply that the heat of vaporization of the substance increases with increasing temperature. Thermodynamic data for many compounds suggests this is unrealistic. Large negative values can lead to unrealistically low vapor pressure values coupled with excessive fixed gas contributions. The -235(K) bound is chosen to be consistent with literature values of B2 for many pure compounds. For hydrocarbons in the LVP-VOC range, B2 ≥ -100 provides reasonable agreement between measured and literature vapor pressures.
- d. The fixed gas coefficient, B3, should normally be 200

Figure 1
ISOTENISCOPE VAPOR PRESSURE MEASUREMENT APPARATUS



Attachment B to Resolution 04-18

FOR CONSIDERATION BY THE AIR RESOURCES BOARD AT THE PUBLIC HEARING ON THE PROPOSED AMENDMENTS
TO THE CALIFORNIA CONSUMER PRODUCTS REGULATION AND TEST METHOD 310

AND

PROPOSED AIRBORNE TOXIC CONTROL MEASURE FOR PARA-DICHLOROBENZENE

June 24, 2004

Staff's Suggested Modifications to the Original Proposal

Note: This attachment shows the staff's suggested modifications to the originally proposed amendments. Only those portions containing the suggested modifications are included. The originally proposed regulatory language is shown in <u>underline</u>, and the text to be removed is shown in <u>strikeout</u>. The suggested modifications are shown in <u>double underline</u> to indicate additions and double strikeout to indicate deletions. All proposed modifications will be made available to the public for a fifteen day comment period.

Amend section 94509(c), title 17, California Code of Regulations (CCR), to read as follows:

- (c) Sell-through of products.
- (1) Sell-through period. Notwithstanding the provisions of Section 94509(a) or 94509(j) (k) (j), a consumer product manufactured prior to each of the effective dates specified for that product in the Table of Standards may be sold, supplied, or offered for sale for up to three years after each of the specified effective dates. This subsection (c) does not apply to:
 - (\underline{A}) any consumer product that does not display on the product container or package the date on which the product was manufactured, or a code indicating such date-, or
 - (B) any consumer product on which the manufacturer has used a code indicating the date of manufacture that is different than the code specified in section 94509 94512(b)(2), but an explanation of the code has not been filed with the ARB Executive Officer by the deadlines specified in section 94509 94512(c)(1) or section 94509 94512(c)(2), or

- (C) Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene; these products are subject to the one-year sell-through period specified in section 94509 (e)(n).
- (D) Products contained in multi-unit packages, as specified below:
 - 1. Subsection (c) does not apply to any individual consumer products unit contained within a multi-unit package that is produced or assembled after January 1, 2006, where the multi-unit package does not display the date(s) or date-code(s) of the individual product units, or display the date of assembly, such that the displayed information is not readily observable without irreversibly disassembling any portion of the container or packaging.
 - 2. For the purposes of this section, "date of assembly" means the date that the individual product units are assembled into the finished multi-unit package.
 - 3. For multi-unit packages that display the "date of assembly" instead of the date(s) or date-code(s) of the individual product units, the "date of assembly" shall be the "date of manufacture" for all of the product units contained within the multi-unit package. In other words, all of the product units shall be deemed to have been manufactured on the date these units are assembled into the multi-unit package, even if the individual product units show different date(s) or date-code(s).
- (2) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product subject to the Table of Standards in section 94509 must notify the purchaser of the product in writing of the date on which the sell-through period for that product will end, provided, however, that this notification must be given only if all of the following conditions are met:
 - (A) the product is being sold or supplied to a distributor or retailer;
 - (B) the sell-through period for the product will expire 6 months or less from the date the product is sold or supplied; and
 - (C) the product does not comply with the lowest VOC standard that apply on the date the sell-through period ends₌; and
 - (D) the product is subject to a VOC standard with an effective date on or after December 31, 2004.

Amend sections 94509(n) and 94509(o), title 17, (CCR), to read as follows:

Note: Subsections 94509(n) and 94509(o) have been renumbered to subsections 94509(m) and 94509(n), respectively, to correct a numbering error that exists in proposed section 94509.

- (n) (m) Requirements for Adhesive Removers, Contact Adhesives, Electrical Cleaners, Electronic Cleaners, Footwear or Leather Care Products, General Purpose Degreasers, and Graffiti Removers.
 - (1) Except at provided below in sections 94509(n)(n)(2) and (n)(m)(4), effective December 31, 2006 2005, no person shall sell, supply, offer for sale, or manufacture for use in California any Adhesive Remover, Contact Adhesive, Electrical Cleaner, Electronic Cleaner, Footwear or Leather Care Product, General Purpose Degreaser, or Graffiti Remover that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.
 - (2) Sell-through of Products. Adhesive Removers, Contact Adhesives, Electrical Cleaners, Electronic Cleaners, Footwear or Leather Care Products, General Purpose Degreasers, and Graffiti Removers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before December 31, 2006 2005, may be sold, supplied, or offered for sale until December 31, 2009 2008, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date.
 - (3) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product identified above in section 94509(n)(n)(1) must notify the purchaser of the product in writing that the sell-through period for that product will end on December 31, 2009 2008, provided, however, that this notification must be given only if both of the following conditions are met:
 - (A) the product is sold or supplied to a distributor or retailer; and (B) the product is sold or supplied on or after June 34 30, 2009 2008.
 - (4) Impurities. The requirements of section 94509(n)(n)(1) and (n)(n)(3) shall not apply to any Contact Adhesive, Electrical Cleaner, Electronic Cleaner, Footwear or Leather Care Product, General Purpose Degreaser, or Graffiti Remover containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01% by weight.

(n) Requirements for Solid Air Fresheners and Toilet/Urinal Care Products.

- (1) Effective December 31, 2006 2005, no person shall sell, supply, offer for sale, or manufacture for use in California any Solid Air Fresheners or Toilet/Urinal Care Products that contain para-dichlorobenzene, except that Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene and were manufactured before December 31, 2006 2005 may be sold, supplied, or offered for sale until December 31, 2007 2006, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date.
- (2) Notification for products sold during the sell-through period. Any person who sells or supplies any Solid Air Freshener or Toilet/Urinal Care Product that contains para-dichlorobenzene must notify the purchaser of the product in writing that the sell-through period for the product will end on December 31, 2007 2006, provided, however, that this notification must be given only if both of the following conditions are met:
 - (A) the product is sold or supplied to a distributor or retailer; and (B) the product is sold or supplied on or after June 31 30, 2007 2006.

Amend section 94510(g), title 17, (CCR), to read as follows:

- (g)(1) The VOC limits specified in Section 94509(a) shall not apply to air fresheners and insecticides containing at least 98% para_dichlorobenzene.
 - (2) Until December 30, 2006, the VOC limits specified in Section 94509(a) shall not apply to solid air fresheners containing at least 98% para-dichlorobenzene. On or after December 31, 2006, the provisions of section 94509(n) apply to solid air fresheners containing para-dichlorobenzene.

Amend section 94512, title 17, (CCR), to read as follows:

94512. Administrative Requirements

- (a) Most Restrictive Limit.
 - (1) Products Manufactured Before January 1, 2007, and FIFRA-registered Insecticides Manufactured Before January 1, 2008. Notwithstanding the definition of "product category" in Section 94508, if anywhere on the principal display panel of any consumer product manufactured before January 1, 2007, or any FIFRA-registered insecticide manufactured before January 1, 2008, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in Section 94509(a), then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners and insecticide foggers.
 - (2) Products Manufactured on or After January 1, 2007, and FIFRA-registered Insecticides Manufactured on or After January 1, 2008. Notwithstanding the definition of "product category" in Section 94508, if anywhere on the container or packaging of any consumer product manufactured on or after January 1, 2007, or any FIFRA-registered insecticide manufactured on or after January 1, 2008, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in Section 94509(a), then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners and insecticide foggers.
- (b) Gode Product Dating.
 - (1) Each manufacturer of a consumer product subject to Section 94509 shall clearly display on each consumer product container or package, the day, month, and year on which the product was manufactured, or a code indicating such date.
 - (2) A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of section 94509(c)(1), if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD = year year day day day

Where: "YY" = two digits representing the year in which the product was manufactured, and

"DDD" = three digits representing the day of the year on which the product was manufactured, with "001" representing the first day of the year, "002" representing the second day of the year, and so forth (i.e. the "Julian date")

- (3) This date or code shall be displayed on each consumer product container or package no later than twelve months prior to the effective date of the applicable standard specified in Section 94509. No person shall erase, alter, deface or otherwise remove or make illegible any date or code date from any regulated product container without the express authorization of the manufacturer.
- (4) Except as otherwise provided in subsection (b)(5),

 for products manufactured on or after January 1, 2006, the date or code shall be displayed on the product container such that it is readily observable without irreversibly disassembling any portion of the product container or packaging. For the purposes of this subsection, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.
- (5) Products Sold in Multi-unit Packages.
 - (A) Products sold, supplied, or offered for sale in multi-unit packages are not required to comply with subsection (b)(4).
 - (B) If a multi-unit package does not comply with subsection (b)(4), the "sell-through" provisions of section 94509(c)(1) shall not apply to the individual product units contained within the multi-unit package. In other words, if any multi-unit package produced or assembled after January 1, 2006, does not display the date(s) or date-code(s) of the product units, such that the displayed information is readily observable without irreversibly disassembling any portion of the container or packaging, the individual product units shall be subject to the VOC standards in effect when the multi-unit package is sold, supplied, or offered for sale, regardless of the date on which the product units were manufactured.
 - (C) A multi-unit package may comply with subsection (b)(4) by displaying the date of assembly instead of the date(s) or date-code(s) of the individual product units, so long as the date of assembly is readily observable without irreversibly disassembling any portion of the container or packaging. The "date of assembly" means the date that the individual product units are assembled into the finished multi-unit package. If the date of assembly is displayed instead of the individual date(s) or date-code(s), the "date of assembly" shall be the "date of manufacture" for all of the product units contained within the multi-unit package. In other words, all of the product units shall be deemed to have been manufactured on the date these units are assembled into the multi-unit package, even if the individual product units show different date(s) or date-code(s), and the "date of assembly" shall be "date of manufacture" of each product unit for the purposes of applying the "sell-through" provisions of section 94509(c).

- (6) The requirements of this provision subsection (b) shall not apply to:
 - (1)-(A) personal fragrance products of 2 milliliters or less, which are offered to consumers free of charge for the purpose of sampling the product; or
 - (2) (B) products containing no VOCs (as defined in section 94508), or containing VOCs at 0.10% by weight or less.

Additional Suggested Changes to the "Most Restrictive Limit" provision in section 94512, title 17, CCR.

Staff intends to propose additional modifications to the "most restrictive limit" provision contained in section 94512 of the consumer products regulation.

The proposed modifications would clarify the ARB staff's long-standing interpretation of how the "most restrictive limit" provision interacts with some of the definitions set forth in section 94508(a) of the consumer products regulation. Some of the definitions for particular product categories state that a defined product category "does not include" one or more other product categories. For example, the definition of "Spot Remover" states: "... "Spot Remover " does not include "Dry Cleaning Fluid", "Laundry Prewash", "Carpet and Upholstery Cleaner," or "Multi-purpose Solvent"." Some individuals have questioned whether the "most restrictive limit" provision applies to a product that meets such a definition but also represents on its label that it may be used as, or is suitable for use as, a consumer product category that is excluded from the product definition. For example, would the "most restrictive limit" provision apply to a product that meets the definition of a "Spot Remover," but also represents on its principal display panel that it may be used as a "Carpet and Upholstery Cleaner?"

The ARB staff's long-standing interpretation has been that the "most restrictive limit" provision does apply in this situation, such that a product is subject to the lowest VOC limit for any product category for which such representations are made, even if that product category is excluded from the definition. In the example discussed above, a nonaerosol "Spot Remover" (which has an 8 percent VOC limit) which represents on its principal display panel that it may be used as ready-to-use "Carpet and Upholstery Cleaner" (which has a 3 percent VOC limit), would be subject to the 3 percent VOC limit. Although this has long been staff's interpretation, some members of the regulated community may not fully understand this. The proposed modifications would clarify that the "most restrictive limit" provision applies in the situations discussed above. Specific regulatory language will be made available for public comment during the 15-day comment period for this regulatory action.

Additional Suggested Changes to the Prohibition on the Toxic Air Contaminants Methylene Chloride, Perchloroethylene, and Trichloroethylene provision in section 94509(m), title 17, CCR.

In the modifications to section 94509(m) listed above, staff proposes to accelerate by one year—from December 31, 2006 to December 31, 2005—the effective date for prohibiting the toxic air contaminants methylene chloride, perchloroethylene, and trichloroethylene, in Adhesive Removers, Contact Adhesives, General Purpose Degreasers, Electrical Cleaners, Electronic Cleaners, Footwear or Leather Care Products, and Graffiti Removers. It is possible that an earlier effective date of December 31, 2005 is not appropriate for some of these product categories. Staff therefore proposes to further evaluate all available data to determine whether there are any product categories for which a later effective date of December 31, 2006 should be specified. Staff would evaluate whether manufacturers can provide alternative complying products by the proposed December 31, 2005 effective date in all product categories, or whether there are categories where extensive reformulation efforts must be undertaken and an effective date of December 31, 2006 is necessary. Any appropriate modifications to the effective dates would be reflected in the modified regulatory language made available to the public for the 15-day comment period.